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UNITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS

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This Issue in Brief

Income from wages and salaries in the postwar period

Full employment and a substantial increase in wage rates will be essential if a postwar decrease in wage-salary income is to be averted. Reduction of hours of work, the transfer of workers from war to peacetime industries and the elimination of shift-premium pay in certain war industries will, if not offset by other changes, result in a decrease of 16.7 billion dollars in payments for wages and salaries. Page 401.

Employment opportunities for welders

The employment outlook for welders is less favorable than for many other metalworking occupations. Employment of welders and burners, which rose to an all-time peak of 364,000 during the war, will show a very substantial decline in the immediate postwar period, primarily because of a reduction in shipbuilding activity. Even under favorable economic conditions the peacetime level of welding jobs is likely to remain for many years far below the wartime number. The large number of persons who have received welding training during the war is also an important factor limiting opportunities in this occupation. A comprehensive analysis of the employment opportunities for welders is presented in the article on page 414.

ILO preparation for Paris conference

Paris will be the scene of a conference of the International Labor Organization, to be held October 15 to November 7, 1945. Major subjects to be dealt with include means of maintaining a high level of employment during the postwar period of industrial reconversion, the welfare of children and young workers, minimum standards of social policy in dependent territories, and constitutional changes to facilitate affiliation with the United Nations Organization. Page 433.

Wartime changes in agricultural employment

Wartime conditions accelerated the relative decline of farm employment. The number of farm workers in July 1944 was 9 percent smaller than the July 1935-39 average, yet farm production in 1944 reached its all-time peak, a third above the 1935-39 level. Every region except the Pacific States shared the decline in farm employment. Changes in the farm employment structure and in the volume and types of agricultural production, combined with opportunities for nonfarm jobs, were factors contributing to the extensive regional fluctuations in farm employment. The greatest percentage declines were among hired workers, except in the Pacific States where an increase occurred. Postwar farm employment will depend primarily on high levels of production and employment in nonagricultural enterprises. Page 442.

Employment conditions in Italy, 1944-45

In Northern Italy a policy of guaranteed wages for industrial workers was continued by agreement until the end of July 1945. Both wages and cost of living were rising in that area. In the southern and central parts of Italy, 58 percent of the workers attached to industrial establishments covered in a sample survey were partially or wholly unemployed. Losses suffered by 40 percent of the establishments which were surveyed for war damages amounted to 34.7 percent of prewar valuation. Page 455.

Operations of consumers' cooperatives in 1944

All-time peaks in membership and business were reached by the distributive and service organizations of the consumers' cooperative movement in the United States in 1944. Electricity cooperatives accelerated the advance which had been

retarded, since 1941, largely by shortages of metals and other materials. The credit unions, for which the prosperous war years had been a time of sharply falling business, began to show increases in loans again. The article on page 467 gives data on the operations of the various types of cooperatives in 1944 and traces the trend of their development since 1929.

Union agreements in the tobacco industry

Approximately 90 percent of the wage earners in the cigarette, smoking and chewing tobacco, and snuff branch and about 50 percent of the wage earners in the cigar branch of the tobacco industry are employed in plants which have negotiated agreements with national or international unions. An analysis of union agreement provisions in both branches of the industry is given on page 483.

Trends in urban wage rates, October 1944 to April 1945

Urban wage rates in both manufacturing and nonmanufacturing industry continued to rise between October 1944 and April 1945, but at a slightly lower rate of increase than during the preceding 6 months. The largest and most widely spread rate increase in manufacturing occurred in the apparel and leather products industry groups, in which wage rates had risen 6.7 and 4.2 percent, respectively. Wage rates had advanced less than half of 1 percent in the petroleum, paper, and basic iron and steel industry groups. Retail trade was highest among the selected nonmanufacturing industries studied, with an increase of 4.6 percent. The Southeastern and Middle Atlantic States registered the largest increases throughout industry in general. For manufacturing industry, the 1.6-percent rise brings the increase in urban wage rates since January 1941 to about 32 percent. For the nonmanufacturing industries the 3.7-percent increase brings the total average increase to 18 percent since April 1943, the earliest date that comparable data were available. Page 519.

Revised estimates of factory wage earners paid less than 65 cents per hour

Estimates by the Bureau of Labor Statistics, to determine the probable impact of the proposed 65-cent minimum wage, indicate that in the summer of 1945 only about 20 percent of the approximate total of 12,200,000 factory wage earners employed were being paid straight-time hourly wages of less than 65 cents. In the various industries, the proportion varied from less than half of 1 percent in the manufacture of transportation equipment to over 50 percent in the tobacco and lumber industries. Page 529.

Prices in the second quarter of 1945

The end of the war in Europe during the second quarter of 1945 brought no immediate change in the general trend of prices. Retail prices of living essentials rose 1.7 percent, to the highest level since the spring of 1921, and primary-market prices advanced 0.8 percent. In many respects, the quarter was a period of transition. There was a continuation of pressures of earlier months, but lower income payments, military cut-backs, and scattered improvements in civilian supplies indicated some lessening of pressures. Page 539.

CURRENT LABOR STATISTICS

V

Current Statistics of Labor Interest in Selected Periods ¹

[Available in reprint form]

Item	Unit or base period	1945			1944	1939: average for year
		July	June	May	July	
<i>Employment and unemployment</i>						
Civilian labor force (BC): Total.....	Thousands.....	53,750	53,140	52,030	55,000	² 54,230
Male.....	do.....	34,940	34,380	33,790	35,890	² 40,950
Female.....	do.....	18,810	18,760	18,240	19,110	² 13,280
Employed ³	do.....	52,660	52,060	51,300	54,000	² 46,930
Male.....	do.....	34,380	33,800	33,360	35,410	² 35,600
Female.....	do.....	18,280	18,260	17,940	18,590	² 11,330
Nonagricultural.....	do.....	43,520	42,970	43,350	44,330	² 37,430
Agricultural.....	do.....	9,140	9,090	7,950	9,670	² 9,500
Unemployed.....	do.....	1,090	1,080	730	1,000	² 7,300
Civilian employment in nonagricultural establishments: Total. ³	do.....	37,177	37,556	37,698	38,731	30,353
Manufacturing.....	do.....	14,100	14,523	14,811	16,013	10,078
Mining.....	do.....	795	803	728	833	845
Construction ⁴	do.....	901	848	798	686	1,753
Transportation and public utilities.....	do.....	3,834	3,833	3,801	3,809	2,912
Trade.....	do.....	6,980	7,001	7,021	6,942	6,618
Finance, service, and miscellaneous.....	do.....	4,650	4,595	4,513	4,618	4,160
Federal, State, and local government, excluding Federal force-account construction.....	do.....	5,917	5,953	6,006	5,830	3,988
Military personnel.....	do.....	12,300	12,300	12,200	11,600	362
Production-worker employment: ⁵						
Manufacturing.....	do.....	11,752	12,157	12,406	13,544	8,192
Bituminous-coal mining.....	do.....	324	331	327	351	371
Class I steam railroads, including salaried employees (ICC).....	do.....	1,451	1,454	1,427	1,443	988
Hired farm workers (BAE).....	do.....	2,544	2,357	1,864	2,732	⁶ 3,348
<i>Hours and earnings</i>						
Average weekly hours:						
Manufacturing.....	Hours.....		44.6	44.1	⁷ 45.4	37.7
Bituminous-coal mining.....	do.....		46.0	42.4	⁷ 44.0	27.1
Retail trade.....	do.....		40.6	39.4	⁷ 43.2	43.0
Building construction (private).....	do.....	41.6	42.2	39.3	40.6	32.4
Average weekly earnings:						
Manufacturing.....			\$46.35	\$46.01	⁷ \$46.24	\$23.86
Bituminous-coal mining.....			\$59.04	\$53.75	⁷ \$52.10	\$23.88
Retail trade.....			\$28.46	\$27.56	⁷ \$27.83	\$21.17
Building construction (private).....		\$54.04	\$54.88	\$53.64	\$52.81	\$30.24
Average hourly earnings:						
Manufacturing.....			\$1.039	\$1.043	⁷ \$1.017	\$0.633
Bituminous-coal mining.....			\$1.281	\$1.256	⁷ \$1.182	\$0.886
Retail trade.....			\$0.770	\$0.764	⁷ \$0.706	\$0.536
Building construction (private).....		\$1.301	\$1.300	\$1.366	\$1.302	\$0.933
Average straight-time hourly earnings in manufacturing, using—						
Current employment by industry.....			\$0.970	\$0.977	⁷ \$0.950	\$0.622
Employment by industry as of January 1939.....			\$0.905	\$0.908	⁷ \$0.874	\$0.622
Quarterly farm wage rate, per day without board (BAE).....		\$4.48			\$4.06	⁸ \$1.59
<i>Industrial injuries and labor turn-over</i>						
Industrial injuries in manufacturing, per million man-hours worked.....			⁹ 17.1		⁹ 19.3	15.4
Labor turn-over per 100 employees in manufacturing:						
Total separations.....		7.8	7.9	7.0	6.6	⁹ 3.4
Quits.....		5.2	5.1	4.8	5.0	⁹ 0.7
Lay-offs.....		1.6	1.7	1.2	0.5	⁹ 2.5
Total accessions.....		5.6	5.9	5.0	6.3	⁹ 4.2
<i>Strikes and lock-outs</i>						
Strikes and lock-outs beginning in month:						
Number.....		500	485	425	469	218
Number of workers involved.....	Thousands.....	290	292	310	172	98
All strikes and lock-outs during month:						
Number of man-days idle.....	do.....	1,500	1,725	2,025	652	1,484
Man-days idle as percent of available working time.....		0.21	0.23	0.26	0.08	0.28

See footnotes at end of table.

Current Statistics of Labor Interest in Selected Periods ¹—Continued

Item	Unit or base period	1945			1944	1939: average for year
		July	June	May	July	
<i>Cost of living and prices</i>						
Cost-of-living index (wage earners in large cities): All items. ⁹	1935-39=100	129.4	129.0	128.1	126.1	99.4
Food	1935-39=100	141.7	141.1	138.8	137.4	95.2
Clothing	1935-39=100	145.7	145.4	144.6	138.3	100.5
Rent	1935-39=100		108.3		108.2	104.3
Fuel, electricity, and ice	1935-39=100	111.2	110.0	110.0	109.7	99.0
Housefurnishings	1935-39=100	145.3	145.8	145.4	138.7	101.3
Miscellaneous	1935-39=100	124.2	124.0	123.9	122.0	100.7
Retail food price index (large cities): All foods	1935-39=100	141.7	141.1	138.8	137.4	95.2
Cereals and bakery products	1935-39=100	109.1	109.1	109.0	108.6	94.5
Meats	1935-39=100	131.6	131.6	131.7	129.3	96.6
Dairy products	1935-39=100	133.4	133.4	133.5	133.6	98.9
Eggs	1935-39=100	157.2	145.1	140.7	148.9	91.0
Fruits and vegetables	1935-39=100	191.8	192.6	182.5	176.9	94.5
Beverages	1935-39=100	124.7	124.7	124.6	124.3	95.5
Fats and oils	1935-39=100	124.0	123.9	123.9	122.9	87.7
Sugar and sweets	1935-39=100	126.5	126.4	126.5	126.6	100.6
Wholesale price index: All commodities	1926=100	105.9	106.1	106.0	104.1	77.1
All commodities other than farm products	1926=100	100.7	100.7	100.6	99.6	79.5
All commodities other than farm products and foods	1926=100	99.7	99.6	99.4	98.5	81.3
Farm products	1926=100	129.0	130.4	129.9	124.1	65.3
Foods	1926=100	106.9	107.5	107.0	105.8	70.4
<i>National income and expenditures</i>						
National income payments (BFDC)	Millions	\$13,523	\$14,397	\$12,835	\$12,928	⁶ \$5,806
Consumer expenditures for goods and services (BFDC)	do		¹⁰ \$24,510		¹⁰ \$24,045	¹⁰ \$15,406
Retail sales (BFDC)	do	\$5,757	\$6,079	\$5,922	\$5,534	⁶ \$3,349
<i>Production</i>						
Industrial production index, unadjusted (FR): Total	1935-39=100	213	221	225	232	109
Manufacturing	1935-39=100	225	234	240	248	109
Minerals	1935-39=100	147	147	141	143	106
Bituminous coal (BM)	Thousands of short tons	47,400	50,890	49,520	48,986	32,905
Carloadings index, unadjusted (FR)	1935-39=100	143	145	142	147	101
Electric energy (FPC): Total	Millions of kw.-hrs.	23,050	22,999	23,086	22,963	(¹¹)
Utilities (production for public use)	do	18,952	18,833	19,409	18,792	⁶ 10,443
Industrial establishments	do	4,098	4,166	4,277	4,171	(¹¹)
<i>Construction</i>						
Construction expenditures	Millions	\$525	\$500	\$472	\$419	⁶ \$684
Value of urban building construction started	do	\$169	\$146	\$135	\$98	(¹¹)
New nonfarm family-dwelling units		22,900	20,400	19,400	14,500	⁶ 44,200

¹ Source: Bureau of Labor Statistics unless otherwise indicated. Abbreviations used: BC (Bureau of the Census); ICC (Interstate Commerce Commission); BAE (Bureau of Agricultural Economics); BFDC (Bureau of Foreign and Domestic Commerce); FR (Federal Reserve); BM (Bureau of Mines); FPC (Federal Power Commission). Most of the current figures are preliminary.

² 10-month average—March to December 1940.

³ Excludes employees on public emergency work, these being included in unemployed civilian labor force. Civilian employment in nonagricultural establishments differs from employment in civilian labor force mainly because of exclusion of such groups as self-employed and domestic and casual workers.

⁴ Includes workers employed by construction contractors and Federal force-account workers (nonmaintenance construction workers employed directly by the Federal Government). Other force-account non-maintenance construction employment is included under manufacturing and the other groups.

⁵ Reports in manufacturing and mining now relate to "production workers" instead of "wage earners" but with no appreciable effect on the employment estimates.

⁶ July.

⁷ June.

⁸ Cumulative January through June.

⁹ For the coverage of this index, see p. 553.

¹⁰ Second quarter.

¹¹ Not available.

MONTHLY LABOR REVIEW

SEPTEMBER 1945

Income From Wages and Salaries in the Postwar Period

By ROBERT J. MYERS and N. ARNOLD TOLLES, U. S. Bureau of Labor Statistics ¹

Summary

TOTAL payments for wages and salaries, exclusive of military pay, more than doubled from 1939 to 1944, and accounted for a major part of the increase in national income. In 1944 these payments reached their highest annual level of 98 billion dollars. Several of the forces that contributed to the wartime rise, however, can be expected to reverse themselves, now that the war is over, and will tend to reduce the volume of wage-salary income. Thus, by 1947, unless counterbalanced by other changes, the reduction of the workweek, the loss of shift premiums in the leading war industries, and the transfer of workers from war production to lower-paid civilian production may be expected to reduce wage-salary income by about 16.7 billion dollars. This reduction, however, may be partially offset by increased employment following demobilization of the armed forces. If, in addition to full employment, wage rates can be increased, wartime wage and salary payments may be approximated.

With full employment and an increase of somewhat more than 10 percent in wage rates, the volume of wage-salary income can be maintained at about the 1944 level. Full employment at current rates, however, will mean a drop of 11 billion dollars. "Medium" employment at current rates will mean a decline of 22 billion dollars. Low employment—about the 1939 level—would probably lead to a reduction of wage rates and, estimating this reduction at 10 percent, would result in a wage-salary income about 40 billion dollars below that attained in 1944.

Even with a modest decrease in the volume of wage-salary income, the level of living of most workers can be expected to improve in the postwar period. This will be because a greater part of the workers' income will be available for expenditure and because consumer goods will be more plentiful and of better quality. The total volume of consumer purchases will also increase if full employment is achieved, and even with medium employment can be expected to maintain a high level. Any drop in the volume of wage-salary payments, however, will probably be accompanied by a decline in national income.

¹ Margaret Cavallo of the Bureau's Wage Analysis Branch supervised the tabulations and assisted in the preparation of the estimates.

Wages and Salaries as a Component of National Income

The importance of wages and salaries in the lives of individuals is more commonly appreciated than is the influence of aggregate wage-salary payments on the economy of the Nation. About nine-tenths of the adult population of the United States regard a wage or salary as their chief source of livelihood, but few understand the significance of such payments as the largest component of national income. Tax deductions from the pay envelope are commonly thought of only as an individual affliction and not as a major source of revenue for operating the Federal Government.

The influence of wage-salary income on the volume of business activity has received increasing emphasis among economists in recent years, however, and it is now rather generally agreed that, if current or higher prices continue, a high level of such income is a prerequisite to optimum production and full employment after the war. This is because of the importance of wages and salaries as the source of income that is required for the purchase of consumer goods and indirectly for the stimulation of capital outlay. The drastic curtailment of Government orders at the end of the war, unless offset by heavy and sustained buying by the consumer and by private business, will result in widespread closing of stores and factories and the loss of employment for millions of persons.

The volume of wage-salary payments in the postwar period will, of course, reflect a considerable variety of factors, including rates of pay, hours of work, the composition of the labor force, and the level and pattern of employment. To attain proper balance in combining such factors is undoubtedly one of the most complex and delicate problems that will be faced in the reconversion period. The purpose of the present article is not to urge the adoption of one policy or another with regard to these critical factors, but rather, as an aid in policy formulation, to evaluate their influence.

WARTIME TREND OF WAGE-SALARY INCOME

Before presenting the estimates of postwar wage-salary income that form the basis for this discussion, it will be helpful to review the recent trend of this segment of national income and to discuss the major economic considerations that presage future change. The wartime trend of wage and salary payments is reflected in table 1, which shows the major sources of wages and salaries from 1939 to 1944 inclusive. Several features of this summary table are of interest in connection with the present discussion, particularly the magnitude of the wartime increase in wage-salary income, the importance of war work in accounting for that increase, and the present dominant position of manufacturing industry.

Wage and salary income, exclusive of payments to members of the armed forces,² more than doubled between 1939 and 1944, and in the latter year achieved the unprecedented total of 98 billion dollars. This was almost two-thirds of the total national income in 1944, and

² Wage and salary income, as discussed in this article, excludes payments to military personnel but is otherwise interpreted broadly and includes all compensation to private individuals for their services as employees. The amounts referred to are gross earnings, before deductions for income taxes or social security taxes, and include perquisites, where found, as well as monetary payments. Including payments to members of the armed forces, the aggregate of all wage and salary income in 1944 was 113 billion dollars.

represented an average annual income of approximately \$2,310 per worker.³ The greatest increase, it will be noted, came from 1940 to 1943; approximately full production was achieved by the latter year.

TABLE 1.—*Estimated Wage and Salary Income, by Source, 1939-44*¹

[In millions]

Source	1944 ²	1943	1942	1941	1940	1939
All sources.....	\$98, 131	\$92, 500	\$76, 204	\$59, 528	\$48, 050	\$43, 847
Manufacturing.....	42, 448	40, 796	30, 653	21, 503	15, 372	13, 189
Mining.....	2, 204	2, 039	1, 835	1, 600	1, 332	1, 178
Contract construction.....	2, 615	3, 670	4, 644	2, 753	1, 674	1, 550
Transportation and utilities.....	9, 787	8, 390	6, 961	5, 875	5, 167	4, 913
Trade.....	12, 498	11, 347	10, 452	9, 824	8, 404	7, 772
Finance, insurance and real estate.....	2, 948	2, 812	2, 648	2, 508	2, 324	2, 248
Service ³ and miscellaneous.....	10, 689	9, 467	8, 551	7, 624	6, 826	6, 402
Agriculture (hired hands).....	1, 631	1, 452	1, 177	900	752	738
Government ⁴	13, 311	12, 527	9, 283	6, 941	6, 199	5, 857

¹ Data are from U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce. Figures for 1939 to 1943, inclusive, are based on table 14, of National Income and National Product in 1943, in Survey of Current Business, April 1944. BFDC estimates of agricultural wages and salaries have been added, however, and payments to members of the armed forces excluded; the data for "government" for 1942 and 1943 have been revised. The 1944 data represent preliminary figures supplied by courtesy of the BFDC. Revisions of some of the estimates for the years 1939-43 appear in the June 1945 issue of the Survey of Current Business; these do not affect the conclusions reached in this article, however, and have not been taken into account.

² Preliminary.

³ Includes domestic service.

⁴ Excludes work-relief wages and all payments to the armed forces.

Manufacturing industry, which paid out about 43 percent of all wages and salaries in 1944, tripled its payments during the 5-year period and exceeded all other major sources in rate of increase. Individual manufacturing industries, to be sure, showed proportionately greater increases than the group as a whole, ranging to more than 30-fold in the transportation-equipment group, which produces primarily ships, aircraft, and tanks. Government ranked second among the major sources, with 14 percent of all wage-salary payments in 1944 and with an increase of more than 125 percent. The civilian personnel of the War and Navy Departments accounted for most of the increase. All of the major sources of wage-salary payments showed gains during the 5-year period, but the increase for the finance, insurance, and real-estate group was less than 25 percent. It will be noted that wages and salaries in contract construction reached their peak in 1942 and have subsequently declined.

Table 1 fails to bring out an additional development that may be readily established by examination of other material. Employment and hours, and hence total wage-salary income, increased more in the high-wage than in the low-wage industries. The existence of relatively high wage rates in the war industries at the outbreak of the war greatly facilitated recruitment for those industries and contributed substantially to the rise of aggregate wage-salary income.

Factors Expected to Affect Level of Wage-Salary Payments

Only a drastic change in the nature of our economy could have produced in the brief span of 5 years the prodigious increase in wage-salary payments reflected in table 1. With the end of the war,

³ This figure represents the approximate average payment to workers employed regularly throughout the year and is computed by dividing aggregate wage-salary income by 42,400,000, the average number of civilians employed for wages and salaries in 1944. If divided among all the different individuals who were employed at any time during the year, wage and salary payments would yield a somewhat smaller average.

however, several of the factors underlying that increase have shown a tendency to reverse themselves. Even at this early stage of the postwar period it is possible to identify, and in some cases to evaluate, the major factors that will affect the volume of wage and salary payments.

Among the foreseeable economic developments of importance in the present discussion, four will probably tend to depress the level of wage-salary payments: (1) The reduction of the hours of work, (2) the resumption of a peacetime pattern of employment, (3) a drop in the rate of output of workers paid on an incentive basis, resulting from shorter runs of individual products, and (4) a decrease in the opportunities for pay supplements. Another probable change, which will tend to increase wage-salary payments, will be (5) an improvement in the quality of the labor force. Two other factors, of transcendent importance, but unpredictable, are (6) the level of employment, and (7) the level of wage rates. The relationship of each of these factors to the level of wage-salary income deserves brief discussion.⁴

Reduction of the workweek will mean not only fewer hours in pay status every week but also, in most cases, the loss of premium overtime payments. Millions of workers who put in a 48-hour week during the war have already reverted to a 40-hour week. This means a reduction of only one-sixth in hours of work but a decrease in weekly wages amounting to 23 percent. Hours of work in manufacturing industry averaged slightly more than 45 per week in 1944, but in the postwar period can be expected to fall to about 38.⁵ Comparable reductions will occur in many nonmanufacturing industries.

The transfer of workers from war production to the service trades and the manufacture of consumer goods implies a shift from high-wage to low-wage industries and from high-wage cities to low-wage cities and rural communities. No reduction of basic wage rates is assumed in this statement. The ex-aircraft assembler who is reemployed in a textile mill will suffer a decline in wages even though basic wage rates in both industries remain unchanged. Although some of the industries expected to flourish in peacetime pay wages comparable to those in the war industries, the great majority have considerably lower scales.⁶

Despite expected increases in the efficiency of labor, the output of incentive workers may decline for a time after the war, thereby reducing wage incomes. Any such decline in output will reflect the resumption of variety production for private consumers, necessitating shorter runs and more frequent changes of materials, equipment, and operations than in war production. Because only the minority of all workers are paid on an incentive basis and because the decline in output is not expected to be substantial, the influence of this development on wage-salary income will be relatively unimportant.⁷

The chief loss in the form of pay supplements after the war will be the disappearance of premium payments for late-shift work in certain

⁴ The influence of most of these factors during the transition from a peacetime to a war economy was discussed, with additional detail, in *Trends in Factory Wages, 1939-43*, in *Monthly Labor Review*, November 1943.

⁵ This assumes a 40-hour week with a deduction for labor turn-over, absenteeism, and similar factors.

⁶ For a comparison of wage rates in war and nonwar industries as of 1943, see *The Level of Factory Wages in Wartime*, in *Monthly Labor Review*, October 1943.

⁷ It is believed by some that the output of incentive workers will increase slightly in the postwar period, owing to liberalization of tolerances, etc. In any event, the net influence of this factor will probably be negligible. Possible reduction of the earnings of incentive workers through lowered output should not be confused with the reduction that may take place as a result of lower piece or bonus rates. In practice it is almost impossible to distinguish the influence of these two factors, since work units (in most incentive-wage industries) are in continual process of change, and subtle changes in the liberality of payment are virtually undetectable.

war industries. It is not assumed that existing rules regarding such premiums will be abrogated but only that reduction of the scale of operations in these industries will reduce the need for late-shift work.⁸

The labor force in the postwar period should include a larger proportion of experienced and skilled workers than does the present labor force; hence a somewhat higher proportion in the higher pay brackets. Many of the older workers now employed may be expected to retire, and many of the youngest workers to return to school. Large numbers of inexperienced women workers, some of them working at beginners' rates, will withdraw from the labor market. On the other hand, several million veterans will again seek employment, the majority of them in their most vigorous and productive years and many of them highly skilled.

More civilian workers will be available after the war than at present, but the trend of employment may be either upward or downward. With regard to this factor, however, there is virtually complete agreement as to a goal of full employment. It is possible, therefore, that legislation⁹ as well as economic factors may help to determine the employment level actually achieved.

The postwar level of wage rates is no more predictable than the postwar level of employment. Undoubtedly powerful forces will continue to exert upward pressure. Wage rates are already somewhat higher than they were in 1944, and union pressure for increases to offset high living costs and shorter hours of work is growing. Labor shortages—at least in some localities and for specialized workers—will stimulate competitive bidding by employers; some relaxation of wage stabilization has already been made, and more is inevitable.

It is primarily through higher wage rates, moreover, that increased labor productivity will affect wage-salary income. Although this article makes no attempt to estimate the gain in productivity that will occur in the postwar period, it is highly probable that this factor will permit an increase in wage rates—possibly a substantial increase—without a corresponding rise in prices.

Offsetting these upward pressures will be several important factors tending to depress wage rates. Cut-backs in war plants and any rapid demobilization of the armed forces will be sure to result in some unemployment, and, if this is severe and prolonged, general wage cuts will be hard to resist. With the return of competitive production for the civilian market, employers will watch their unit costs of production more closely. Aggressive union policy will be unable to protect large numbers of unorganized workers, while "down-grading" and disguised wage cuts for incentive workers will be difficult to control even in union establishments.

Alternative Estimates of Wage-Salary Income in Postwar Period

Fortunately, the influence of most of the factors expected to affect postwar wages and salaries can be predicted with some confidence. Thus, the reduction in wage-salary income that can be expected to result from the resumption of a shorter workweek, the decline of late-

⁸ The loss of premium payments in the war industries may be partly offset by increasing liberality in other directions; for example, in the provision of free lunches or other perquisites. It is doubtful, however, whether such gains will be sufficient to offset the reductions of shift premiums. It should be noted that employers' social-insurance contributions are not regarded as wage income as defined in this article.

⁹ The Murray Bill represents one proposal intended to assure a high level of employment through legislation.

shift work, and the transfer of workers from war to peacetime production may be estimated fairly reliably. Although the postwar trends of employment and wage rates are uncertain, it is possible, by making alternative assumptions, to indicate the general range within which these factors are likely to affect wage-salary income. Unquestionably these measurable factors will account for most of the change in aggregate wages and salaries and provide a basis for a series of meaningful postwar estimates.

METHOD OF ESTIMATION

The methods employed in preparing the following estimates are relatively simple and may be described briefly. The wage (or salary) rates assumed for the postwar period are the estimated average straight-time rates¹⁰ for the year 1944 or are based directly on such rates. With respect to most industries it is assumed that the 40-hour standard week will prevail in the postwar period, yielding an average actual workweek of 38 hours.¹¹ In the case of certain other industries, chiefly nonmanufacturing, it is assumed that hours of work will be about the same as in the prewar period. For each industry (but with modification in the case of the exceptions just noted) the product of the average hourly rate times 38 (hours per week) times 52 (weeks per year) is used as a rough estimate of average annual earnings per worker.

Aggregate wage-salary payments for each industry were obtained by multiplying the average annual earnings per worker by the estimated average number of workers employed during the year. Since the resulting figures represent cash wages only, modest additions have been made in some industries to represent perquisites.¹²

The employment estimates used have, of course, been of fundamental importance in arriving at the final estimates, and therefore justify brief special discussion.¹³ In addition to the estimates for the base year 1944, three sets of postwar estimates have been prepared, representing "full," "medium," and "low"¹⁴ employment. These estimates are designed to represent conditions about 2 years after VJ-day—perhaps about 1947. The assumptions made regarding the size of the labor force, the amount of unemployment, and other conditions related to the respective estimates are given in table 2. The employment estimates for the postwar period make allowance for changes in the distribution of employment by industry as well as for changes in the total volume of employment.¹⁵

¹⁰ For the method used in converting average hourly earnings to average straight-time rates see Elimination of Overtime Payments From Gross Hourly Earnings, Monthly Labor Review, November 1942. In certain nonmanufacturing industries the elimination of overtime payments was accomplished by arbitrary adjustment, while in other cases no adjustment was deemed to be necessary. Premium payments for late-shift work have been removed on an estimated basis from the wage rates of those war industries in which late shifts are expected to disappear. The hourly and weekly earnings data issued by the Bureau's Division of Employment Statistics were used whenever available, but were roughly adjusted in some cases to take account of salaried workers. Other wage data were obtained from official sources wherever possible. All wage data represent amounts payable before deductions for income or social-security taxes or other items. No account has been taken of wage increases granted since 1944.

¹¹ This assumption is justified on the basis of actual experience; the difference between standard hours and actual hours is accounted for largely by various types of absenteeism, labor turn-over, and similar factors. For special purposes, as noted below, the actual average hours prevailing in 1939 are used instead of a uniform 38-hour week.

¹² See also footnote 18, which describes adjustments made to reconcile industry group totals with the official estimates of the Department of Commerce.

¹³ For these estimates of employment by industry the authors have relied heavily on the Bureau's Employment and Occupational Outlook Branch; additional adjustments have been made by the authors, however, in order to adapt the employment figures to the special purposes of this article.

¹⁴ The estimates for "low" employment assume about the same number employed as in 1939 and consequently do not represent the extreme depths of a serious depression.

¹⁵ By way of illustration, it is assumed that to attain full employment will require a particularly large expansion of the construction industry.

TABLE 2.—Assumed Size of Labor Force, Number Unemployed, and Other Features of Postwar Estimates ¹

[In millions]

Item	1944 actual employment	Postwar estimates		
		Full employment	Medium employment	Low employment
Total labor force.....	64.1	60.0	60.0	60.0
Armed forces.....	11.2	2.5	2.5	2.5
Total civilian labor force.....	52.9	57.5	57.5	57.5
Unemployed.....	9	2.0	7.5	12.5
Employed.....	52.0	55.5	50.0	45.0
Self-employed (including farmers).....	9.6	10.0	10.0	10.0
Wage and salaried workers.....	42.4	45.5	40.0	35.0

¹ Because of duplications in the counts for the individual industries—representing workers appearing on two or more pay rolls in the same pay-roll period—the sums of the industry estimates of wage and salaried workers somewhat exceed the unduplicated counts appearing in the last line of this table. The excess for 1944 is 3.0 millions and those for the various postwar estimates are: Full employment, 2.7 millions; medium employment, 2.3 millions; low employment, 2.1 millions.

AUTOMATIC CHANGES IN WAGE-SALARY INCOME

Before taking up the more complex questions of postwar employment and wage rates, attention should be called to the three measurable factors, already mentioned, that will tend to reduce wage-salary income at the end of the war even if employment and wage rates remain unchanged. These are the reduction of hours of work, the interindustry shift of employment, and the elimination of shift differentials in certain war industries.

The most important of these factors is the reduction of weekly hours of work. It has been seen that resumption of the 40-hour week will reduce working hours in manufacturing by approximately 7 per week, on the average, and will mean substantial cuts in many nonmanufacturing industries and in government. Since much of this overtime is paid at rates of time and a half, the loss in wage income will be more than proportional. Assuming that employment and wage rates remain the same, the reduction of hours alone will reduce wage-salary income by about 13 billion dollars.¹⁶

Independent of changes in any other factors, the shift of employment away from the relatively high-paid war industries back to the lower-paid "consumer industries" would mean a loss of about 5.6 billion dollars in wage-salary income. This is a net figure, for some of the industries expected to expand in the postwar period (such as building construction) compare favorably with the war industries with respect to wages.

Premium pay for late-shift work appears to be firmly established as a feature of the wage structure in the United States and it is assumed that shift-premium payments in certain peacetime industries will be continued to about the same extent as at present. In some important war industries, however, notably the shipyards, aircraft factories, and the manufacture of machinery and electrical equip-

¹⁶ Compare with Department of Commerce estimate of 12 billion dollars for 1943. (Survey of Current Business, July 1944, p. 5). The difference between these two estimates is due in part to an actual increase in overtime payments between 1943 and 1944 and in part to differences in the assumptions regarding the amount of overtime or the prevalence of premium pay for certain industries. See also OPA release: Effect of Restoration of 1939 Hours and of Percentage Distribution and Total Volume of Employment on Salaries and Wages (August 1944).

ment, the drastically reduced scale of production will no longer require any substantial amount of late-shift work. It is estimated that shift premiums in the industries mentioned in 1944 amounted to about 450 million dollars and that the total loss of shift-premium payments in the postwar period will be about 0.5 billion dollars.

These amounts include, of course, some duplication. Most of the half-billion dollar loss in shift premiums and part of the 13-billion dollar loss in overtime work is accounted for by the reduction of employment in the war industries. Consequently, the combined effect of all three postwar changes—16.7 billion dollars—is less than the sum of the various components. The importance of this amount is emphasized, however, by pointing out that it means an average loss of nearly \$400 per worker per year. The separate and composite effects of these three automatic postwar changes are shown in table 3 by broad industry division. The substantial reduction of wage-salary income in manufacturing is evident.

TABLE 3.—*Estimated Effect of Specified Postwar Changes on Wage-Salary Income, by Broad Industry Division*

[In billions of dollars]

Industry division	Type of postwar change			
	Unduplicated total	Reduction of hours	Inter-industry shift of employment ¹	Reduction of extra shifts in war industries
Total.....	-16.7	-13.3	-5.6	-0.5
Manufacturing industry.....	-17.7	-8.1	-12.2	-5.5
Nonmanufacturing industry.....	+3.6	-3.5	+7.9	(?)
Government and other nonindustrial.....	-2.6	-1.7	-1.3	(?)

¹ Changes shown for individual divisions reflect shifts to or from other divisions as well as intradivisional shifts.

² Amount believed to be negligible.

WAGE-SALARY INCOME UNDER FULL EMPLOYMENT

The foregoing estimates indicate roughly the decrease in aggregate wage-salary income that could be expected to result if the economy of the United States were to revert to a peacetime basis with no change in the level of employment or in wage rates. Actually, however, the number in the civilian labor market will probably exceed the 1944 level by some 4 or 5 millions. Assuming a civilian labor force of 57.5 millions and allowing only for "frictional unemployment,"¹⁷ the number gainfully employed in the postwar period will be about 55.5 millions and the number working for wages or salaries will be about 10 millions less (45.5 millions). Under full employment, therefore, the number of wage and salary workers will exceed the 1944 level by about 3 millions. This increase in the number of workers will tend to offset the decreases resulting from other causes.

It is indicated by table 4, however, that if wage rates in the postwar period are about the same as in 1944 even full employment will be

¹⁷ Temporary unemployment involved in changing from one job to another, absence on vacation, seasonal lay-offs, etc.

insufficient to maintain the 1944 level of wage-salary income.¹⁸ Aggregate wages and salaries under such circumstances will amount to approximately 87 billion dollars, or about 11 billion dollars less than the 1944 total. Average income per worker may be expected to drop from \$2,310 per year to about \$1,920.

TABLE 4.—*Estimated Aggregate Annual Wage-Salary Income¹ in 1944 and in Postwar Period, Assuming Continuation of 1944 Wage Rates, by Major Industry Group*

[In millions]

Major industry group	1944 ²	Postwar period ³		
		Assuming full employment	Assuming medium employment	Assuming low employment
Total wage-salary income.....	\$98,131	\$87,441	\$75,992	\$64,574
Manufacturing, total.....	42,448	28,029	23,156	19,090
Salaried workers, total.....	9,537	7,479	6,561	5,092
Wage earners, total.....	32,911	20,550	16,595	13,998
Iron and steel.....	4,595	3,282	2,462	1,942
Electrical equipment.....	1,894	844	713	456
Machinery (except electrical).....	3,516	2,013	1,623	1,087
Transportation equipment (except automobiles).....	7,112	717	605	356
Automobiles.....	2,190	1,455	1,150	879
Nonferrous metals and their products.....	1,038	645	411	448
Lumber and timber basic products.....	784	998	787	636
Furniture and finished lumber products.....	667	726	571	507
Stone, clay, and glass products.....	688	736	556	498
Textile-mill products.....	1,801	1,905	1,576	1,510
Apparel and other finished textile products.....	1,283	1,490	1,236	1,137
Leather and leather products.....	553	669	545	514
Food and kindred products.....	1,965	1,549	1,485	1,865
Tobacco manufactures.....	132	136	109	118
Paper and allied products.....	653	617	522	419
Printing and publishing.....	777	797	671	677
Chemicals and allied products.....	1,422	752	555	516
Products of petroleum and coal.....	388	350	264	224
Rubber products.....	527	350	288	242
Miscellaneous industries.....	925	538	467	438
Nonmanufacturing, total.....	38,983	46,724	39,667	33,329
Mining.....	2,204	2,011	1,575	1,415
Contract construction.....	2,615	7,613	4,852	3,673
Transportation and public utilities.....	9,787	8,407	7,857	6,069
Trade.....	12,498	14,559	12,243	10,789
Finance, insurance, and real estate.....	2,948	3,415	3,312	2,807
Service (except domestic) and miscellaneous.....	8,931	10,721	9,827	8,576
Domestic service.....	1,758	1,964	2,357	2,160
Agriculture (hired hands).....	1,631	2,038	2,127	2,216
Government.....	13,311	8,685	8,685	7,770

¹ Excludes payments to members of the armed forces.

² The 1944 classification of establishments, like that for the postwar period, is based on peacetime production; e. g., wages and salaries shown for the automobile industry are those paid by establishments that were manufacturing automobiles in 1939.

³ See table 2 for an indication of the characteristics of "full," "medium," and "low" employment. Under full and medium employment it is assumed that the 40-hour week prevails, with actual hours of work averaging 38. Under low employment actual hours of work are assumed to be the same as the averages in 1939.

⁴ In preparing the distributions of wage-salary income presented in table 4 independent estimates were made in the Bureau of Labor Statistics, based on Bureau estimates of employment, wage rates, and average hours worked; the data presented for nonmanufacturing are summaries of more detailed figures appearing on the original work sheets. The estimates arrived at for 1944, however, differed somewhat from the official estimates of the Department of Commerce, in most cases being lower. In order to increase the usefulness of the material and to avoid confusion, therefore, the original estimates were adjusted so that the major division totals would equal those issued by the Department of Commerce. No attempt was made to reconcile the totals for manufacturing industry groups or for individual nonmanufacturing industries (not shown in table).

In manufacturing and in most of the other major divisions the amount of the adjustment was small and, for purposes of the present rough estimates, of no importance. In the case of contract construction and the service trades, however, the Department of Commerce estimates were considerably higher than estimates based on BLS figures, and substantial upward adjustments were necessary to tie in with the official estimates.

In order to maintain comparability, all adjustments applied to the data for 1944 have also been made in the estimates for the postwar period.

Further study reveals that different segments of the working force would be affected very differently under these conditions. Manufacturing industry would pay out about 14 billion dollars less in wages and salaries than in 1944, with the greater relative cut coming in wages. As would be expected, the greatest decrease is found in the metalworking industries, especially the manufacture of transportation equipment. Several of the industries manufacturing consumer goods, for example, textiles or apparel, would show modest increases. Government wages and salaries would drop substantially. Payments by nonmanufacturing industry, however, would increase by about 8 billion dollars, with most of this increase in the construction industry.

These estimates, as has been noted, are based on the assumption of a continuation of 1944 wage rates. Wage rates are already somewhat higher than in 1944, however, and it is possible that Federal policy may permit and economic factors bring about a continued rise in the future. Under such circumstances full employment would result in higher wage-salary income than is indicated in table 4. By way of illustration, wage rates 10 percent higher¹⁹ than those prevailing in 1944 would yield an annual wage-salary income of about 96 billion dollars; a somewhat greater increase in wage rates would be necessary to maintain the 1944 level of wage-salary payments.

MEDIUM OR LOW EMPLOYMENT

Failure to achieve full employment will seriously reduce the aggregate payments for wages and salaries. Certain conservative estimates have set the probable level of postwar employment at about 50 million workers, which would mean about 40 million persons working for wages and salaries. Employment at this level, however, would yield wage-salary payments of only about 76 billion dollars, or 22 billion dollars less than the 1944 level. Both manufacturing and nonmanufacturing industries would pay out less than under full employment, construction being particularly affected. Total wage-salary payments in nonmanufacturing would still be at about the same level as in 1944, however, while payments by manufacturing and government would be much lower. Even a 10-percent general increase in wage rates under medium employment would yield aggregate wages and salaries totaling only 84 billion dollars.

"Low employment," as has been mentioned, is here defined to mean about the level of employment that prevailed in 1939. The distribution of employees by industry is also patterned largely on 1939 employment, and 1939 average hours of work have been used. Under conditions of low employment about 12.5 million people would be out of work and looking for jobs. With low employment and 1944 wage rates, every industry group could be expected to pay out less in wages and salaries than in 1944, with the exception of construction, domestic service, and agriculture. These occupations, of course, were abnormally depressed in 1944 because of shortages of materials or labor. Total wage-salary income would amount to only 65 billion dollars, or about 34 billion dollars less than the comparable amount for 1944.

¹⁹ This means, of course, a net increase of 10 percent in the level of wage rates and assumes that any downgrading or hidden decreases would be offset by additional wage increases. The example used is intended solely to illustrate the influence of wage-rate changes on the volume of wage-salary payments and is not intended to recommend any particular postwar wage policy.

With 12.5 million unemployed, however, it is probably not realistic to assume that 1944 wage rates would be maintained. A drop of 10 percent in the level of wage rates would cut total wage-salary income to 58 billion dollars.

Table 5 summarizes, by broad economic division, the increase or decrease in postwar wage-salary income, as compared with 1944 income, that results from various assumptions regarding the level of employment and of wage rates.

TABLE 5.—*Alternative Estimates of Change in Postwar Wage-Salary Income as Compared With 1944 Level, by Broad Division*¹

Assumptions on which postwar estimates are based ²			Increase or decrease compared with 1944 (in billions of dollars)			
Level of employment	Level of wage rates	Standard hours of work	Total	Manufacturing	Nonmanufacturing	Government and other nonindustrial
Full.....	As in 1944.....	40.....	-10.7	-14.4	+7.7	-4.0
Full.....	10 percent above 1944.....	40.....	-1.9	-11.6	+12.4	-2.7
Medium.....	As in 1944.....	40.....	-22.1	-19.3	+7.7	-3.5
Medium.....	10 percent above 1944.....	40.....	-14.5	-17.0	+4.7	-2.2
Low.....	As in 1944.....	As in 1939.....	-33.6	-23.4	-5.7	-4.5
Low.....	10 percent below 1944.....	As in 1939.....	-40.0	-25.2	-9.0	-5.8

¹ All estimates exclude payments to members of the armed forces.

² Postwar estimates also assume a distribution of employment by industry consistent with peacetime production, and the termination of extra shifts at premium pay in certain war industries.

Wages, Welfare, Markets, and National Income

It seems clear from these estimates that the current (1944) volume of wage and salary income can be maintained after the war only under conditions of full employment and a substantial increase in the level of wage rates. With anything less than full employment, the volume of wage-salary payments will decline; a level of employment comparable to that of the prewar year 1939 might result in a drop of roughly 40 billion dollars, or about 40 percent.

The achievement of full employment, however, will require a level of production far beyond any level previously attained in peacetime.²⁰ A continuing advance of wage rates in the early postwar period will also, as has been seen, face serious obstacles. The maintenance of wage-salary income at 1944 levels, therefore, cannot be lightly taken for granted. With a national effort less determined or less skillfully directed than that of wartime, the actual volume of such income may fall considerably short of current levels.

WAGE-SALARY INCOME AND LEVELS OF LIVING

Even with a substantial decrease in total wage-salary income, to be sure, the level of living of many American workers may improve in the postwar period. Shorter hours of work will add to the workers' well-being and will eliminate many sacrifices and hidden costs that are associated with wartime living. Consumer goods will become more

²⁰ This is the conclusion of Hagen and Kirkpatrick in *The National Output at Full Employment*, in *American Economic Review*, September 1944. See also *National Budgets for Full Employment* (National Planning Association Pamphlets Nos. 43-44), and John H. G. Pierson: *Fiscal Policy For Full Employment* (N. P. A. Pamphlet No. 45).

plentiful, and these goods will be of better quality. Moreover, reduction of income taxes, discontinuance of bond deductions and, perhaps, liquidation of accumulated savings will enable the worker to spend considerably more at a given level of personal income.²¹ It is sobering to reflect, however, that such gains imply dwindling savings and a consequent narrowing of security margins. If full employment is not attained, moreover, the improved lot of the "average person" will bring little comfort to the unemployed worker.

AGGREGATE PURCHASES OF CONSUMER GOODS

Wages and salaries are not, of course, the only source of consumer purchases, but they are by far the major source. Ordinarily a drop in wage and salary income would have an adverse effect on the postwar market for goods and services. The offsetting factors mentioned above as influencing the expenditures of individuals, however, will also be important with respect to the aggregate expenditures of all workers. A constant or lower level of wage-salary income in the postwar period, therefore, will not be inconsistent with an increase in aggregate consumer outlays.

The relationship between wage-salary income and consumer expenditures is somewhat more complicated with respect to the economy as a whole than it is in the experience of an individual, and justifies brief elaboration. On the one hand, the decrease in wage-salary income will be aggravated by a simultaneous drop in payments to the armed forces. Reduction of these forces from 11.2 million in 1944 to 2.5 million would reduce these payments by more than 11 billion dollars annually. The full effect of this reduction would not fall directly on our domestic economy, since part of these funds during wartime have been spent abroad. It seems safe to estimate, however, that the income of the armed forces available for expenditure at home will decrease by at least 7 billion dollars. Contributions to dependents of military personnel will also fall, but this change will be partly offset by an increase in pensions and similar items, and has not been evaluated.

Tax deductions, however, absorbed about 11 billion dollars of wage-salary income in 1944. Some reduction in tax payments will occur as the annual incomes of workers' families decline, and even greater reductions may be anticipated if tax rates and exemptions are liberalized. Perhaps 3 or 4 billion dollars of income per year can thus be made available for consumer expenditures during the postwar period.

Savings out of wage-salary income probably exceeded 15 billion dollars in 1944. It seems clear that no such annual sum will be saved in the early postwar period. Decreases in per capita income, increases in the supplies of civilian goods for sale, and the cessation of war-bond drives all will operate to reduce the savings made out of income. Although the effect of these factors on aggregate annual savings is very uncertain, it is not unlikely that they will be cut by somewhat more than half, thereby making available for current expenditure an additional 8 billion dollars or more.

Allowing for a reduction of 8 billion dollars in (wage-salary) savings and taking account of the additional factors mentioned above, it

²¹ See N. Arnold Tolles: *Spendable Earnings of Factory Workers, 1941-43*, in *Monthly Labor Review*, March 1944.

seems probable that full employment and a 10-percent increase in wage rates should permit a modest increase in the volume of consumer expenditures.²² If net savings were reduced to zero, expenditures could increase substantially, even if wage-salary payments declined somewhat. Heavy liquidation of war bonds could conceivably result in negative savings of 10 billion dollars or more²³ per year and a further increase in the volume of consumer expenditures.

WAGES AND NATIONAL INCOME

The relationship between wage-salary payments and total national income is by no means direct, but is influenced by a great variety of social, psychological, economic, and political forces. A detailed discussion of such forces in this article would be inappropriate and fruitless, and will not be attempted. Historically, however, the share of national income going to wages and salaries has been rather stable, making it possible to estimate within broad limits the level of national income that will be associated with a given volume of wage-salary payments.

Except for the abnormal years of deep depression and war, wages and salaries during the past quarter century have ranged around 60 percent of total national income. It may be that a somewhat larger share—say 65 percent—will be necessary to facilitate maintenance of full employment in the future.²⁴ Both of these ratios are subject to a considerable margin of error but they should be of value in indicating the general range of our national income under various assumptions as to the level of wage-salary payments.

Using these two percentages and assuming a wage-salary income of 96 billion dollars—the amount that might be achieved under full employment and with a 10-percent increase in wage rates—it is suggested that national income would be in the neighborhood of 150 to 160 billion dollars, still somewhat below the 1944 level of 160.7 billion dollars.²⁵ Increased productivity of labor, lower profit margins, or other factors, however, may permit a greater increase in wage rates in the postwar period, consistent with a higher national income at current price levels.

It has been pointed out that with any considerable amount of unemployment the volume of wage-salary payments would decline; under such circumstances, and assuming no change in price levels, a lower national income should also be expected. With the wage-salary aggregate that would be realized under conditions of "medium" employment and 1944 wage rates national income might approximate 115 to 125 billion dollars, while with low employment and 1944 wage rates national income might fall to 100 billion dollars or slightly more. A national income in this range, caused in part by wartime price rises, would exceed the level of any earlier peacetime year; it would fall far short of our actual accomplishment in 1944, however, and seems unacceptable as a goal for the American people.

²² This discussion has taken account only of wages and salaries and closely related items. Obviously entrepreneurial income, social-security benefits, and other income or savings of individuals will also affect the volume of consumer purchases.

²³ Such liquidation, however, would be unlikely except under conditions of serious unemployment.

²⁴ Historically, the share of national income going to wages and salaries has tended to rise during depressions and decline during prosperity, but it seems unrealistic to assume that a lasting prosperity can be achieved with a smaller percentage of the national income going to labor.

²⁵ Department of Commerce preliminary estimate for 1944.

Employment Opportunities for Welders¹

Summary

THE employment outlook for welders is less favorable than for many other metalworking occupations, and is especially unfavorable for persons without broad welding training or experience. This is the chief conclusion of an analysis of the job prospects for welders made by the Bureau of Labor Statistics to provide information for vocational guidance of veterans, high-school students, and workers released from war production. An immediate postwar drop in the number of welding jobs is indicated, despite the evidence of increasing use of welding in many industries. This decline will be caused mainly by the sharp cuts expected in welding employment in shipbuilding and other war industries.

Hand welders, in general the most skilled, will be more severely affected than machine welders. Among hand welders, the demand for fully qualified all-round workers should hold up better than for those with less skill. A factor depressing the long-run job outlook for welders is the development of improved equipment which increases productivity and reduces the degree of skill required. Local repair and job shops present an opportunity for some skilled welders to enter business for themselves. The demand for welders to replace those who leave the occupation through death or retirement is likely to be low for many years because of the relative youth of most of the welding labor force.

Welding, although a fairly new occupation, was important even before the war, with 125,000 welders and flame-cutters employed in 1940. A spectacular increase in welding employment occurred during the war, mainly because of the large requirements for welders in shipyards. Welders were also important in the production of aircraft and ordnance. The peak wartime employment of welders and flame-cutters is estimated at 364,000.

Welders are used in many industries in maintenance work, but the greatest possibilities for expansion of employment occur in production work. The principal peacetime industries employing welders were automobiles, iron and steel industries, machinery industries, electrical equipment, and local repair services. Although all these industries are expected to employ large numbers of welders in the postwar period, and in many cases provide more welding jobs than they did before the war, this employment will not be large enough to offset the loss of welding jobs in war industries. This reduction in jobs is the more serious when related to the large numbers who have acquired welding training and experience during the war.

¹ Prepared in the Occupational Outlook Division of the Bureau of Labor Statistics by Richard H. Lewis, with the assistance of Calman R. Winegarden.

Women workers held few welding jobs before the war, but during the war their number increased to at least 15 percent of the total welding employment. Women are well adapted to the physical demands of welding, and the large wartime needs for welders combined with the manpower shortage to open up many types of welding jobs to them, particularly in shipbuilding.

There are job opportunities for welders in every State in the country. Before the war, large proportions of the welders were employed in Middle Western States. During the war there has been a shift in importance toward the coastal States, where shipyards and many aircraft plants are situated. The Middle West should again have the largest percentage of the welding jobs in the immediate postwar period, although the actual number of jobs there may be no higher than it was during the war.

The training of welders is mainly confined to hand welders. About 200 hours of instruction in welding theory and practice are considered enough to train a welder to do competent production work, but a period of work experience is required to become an all-round welder.

The wages of hand welders approximate those of many skilled machine operators. During the war their straight-time hourly earnings have generally averaged above \$1 an hour.

Several types of hazards are peculiar to welding work, but proper safety precautions can adequately protect against them. The nature of the working conditions of welders depends greatly upon the industry in which they are employed.

Nature and Importance of the Occupation

To many people, welding has been a symbol of the "war job," representing the typical war-production occupation as distinguished from the normal peacetime vocations. The growing importance of welding in shipbuilding and in aircraft and ordnance manufacture has been the basis for the current widespread vocational interest in welding. Popular interest has been stimulated by the dramatic appearance of the welder, with his bizarre helmet, as he guides the dazzling electric arc along the weld amid a shower of sparks. Welding, however, constituted an important occupation before the war, although it is of comparatively recent origin. The Census of Population reported 125,000 welders and flame-cutters employed in March 1940. This number has been multiplied during the war in response to the requirements of war production.

Welding can only very loosely be considered as a single occupation. Welding processes vary considerably and even for the same method, the welders, or welding operators, as they are frequently termed, may differ in skill and responsibility. In general, welding may be defined as the joining of metal parts while the edges are in a molten or plastic state. This fusion is accomplished through the application of heat, and in some types of welding, mechanical pressure is used simultaneously to force the edges together. Additional metal is often introduced into the weld. A characteristic of welding is that the parts joined actually become fused into one, in many cases actually being stronger at the joint, while in the similar fabricating processes of soldering and brazing the metal parts are attached by using such metals as silver or bronze to bond the edges together without actual fusion occurring.

Oxyacetylene gas welding, the oldest type of welding now in common use, utilizes a direct flame produced by the combustion of acetylene gas with oxygen to make molten the edges of the material joined. Electric-arc welding, the method most frequently used, produces fusion through the intense heat resulting when an electric arc passes a short distance through the air between the material being welded and an electrode manipulated by the welding operator.

Electric-resistance welding is quite a different operation from the two other important types of welding, although its purpose is the same. In this method the heat which causes fusion is produced by resistance to an electric current sent through the materials to be welded. The more important types of resistance welding are spot, butt, flash, and seam welding.

Besides the three most important methods, several other special types of welding are in use. Thermit welding is used mainly for repairing large units made of iron and steel, such as locomotive frames, heavy crank shafts, and railroad rails. A molten steel is produced by melting aluminum powder and iron oxide together in a crucible and pouring the resulting liquid steel around the section to be welded, which has been preheated to protect against the intense heat of the molten steel. Atomic-hydrogen welding and helium-arc welding are two variations of arc welding which are finding increasing application, the helium-arc method being used particularly in the welding of aluminum and magnesium.

The techniques of both methods of hand welding, or manual welding as it is technically called, are similar in many respects. The electric-arc welder touches the welding rod (electrode) to the metal to be welded, completing an electric circuit, and then withdraws it a short distance, causing an electric arc to pass through the intervening space. He then makes the weld by guiding the arc, with its intense heat, along the edges to be joined, usually with metal from the electrode flowing into the weld. The distance the electrode is held from the metal surface and the speed of movement largely determine the nature of the weld.

The principal difference in the oxyacetylene method is that the operator directs upon the weld a flame resulting from the combustion of the two gases in the welding torch. The welder must know how to regulate the flame and adjust the valves which control the mixing of the gases. Additional metal is introduced into the weld from a metal rod held in the welder's other hand.

The skill required for a hand-welding job depends primarily on the scope of the welder's duties. Some jobs involve only the performance of very repetitive operations, which can be learned in a relatively short time. In other cases the welders may be required to have all-round metal-fabricating knowledge. Welding is often regarded by employers as a tool to be applied by skilled metalworkers, rather than as a separate occupational specialty. A fully qualified welder must be able to read blueprints, understand welding symbols, plan the work, and set it up in jigs or other work-holding devices, in addition to being expert in all phases of the actual welding techniques.

The occupation of oxyacetylene burner or flame-cutter is related to oxyacetylene welding, the difference being that the torch is used to cut metal rather than weld. Experience in burning may often serve as partial preparation for a gas-welding job.

The operators of resistance-welding machines are commonly called welders and are classified as such by the Census of Population, but their duties bear little relationship to those of arc or gas welders. Possible opportunities in resistance machine welding are less significant from the viewpoint of vocational guidance. The nature of the machine welder's job depends upon the particular type of equipment, with none of the manipulative skills of arc and gas welding being required, and generalized preemployment training is neither necessary nor possible.

The development and increasing use of automatic arc-welding machines may have a significant effect on employment opportunities for hand welders. The operators of these automatic machines constitute an occupational specialty distinct from manual arc and gas welders and from resistance machine welders, and one that may tend to displace hand welders for many welding applications.

Trends in Prewar Use of Welding

Welding in its modern forms is a comparatively recent development. The method termed "forge welding" dates back many centuries but has been almost entirely superseded by more satisfactory techniques. The most commonly applied types of welding—electric-arc, gas, and electric-resistance—were originated in the 1880's and 1890's and had a slow development until World War I. Progress in welding was stimulated during the war period by its application to several types of ordnance production and to some extent in shipbuilding. It was also used extensively in ship-salvaging operations. For a while after the first World War, welding was used principally as a maintenance tool and for such specialized purposes as pipe-line construction. About 1929 welding began to be applied more widely and intensively in production processes. An indication of the growth in the volume of welding after 1929 is the steady increase in sales of electrodes for arc welding during the 1930's, shown in the Census of Manufactures: the production of arc-welding electrodes, which had been reported at \$1,259,000 in 1929, climbed to \$2,598,000 in 1931, \$5,379,000 in 1935 and to a peak of \$9,888,000 in 1937. In terms of weight of electrodes produced, the increase was even more striking, the total rising from 15,827,643 in pounds in 1931 to 198,995,000 in 1940.²

The greatly increased acceptance of welding as a production process indicated by this trend resulted from several factors. Continual technical progress had been made in welding equipment and accessories, as well as in new applications or techniques. One of the hindrances to widespread acceptance had been the doubt felt by many as to the strength and safety of welds. That attitude was partly attributable to difficulties experienced in inspecting and testing welds. Progress was made in creating equipment and new methods (X-ray and Magniflux, for example) to inspect and test the soundness of welds. The use of welding was also stimulated as production engineers and others began to realize the efficiency and economy of welding for many types of fabrication. Units joined by welding are often lighter and stronger than when other methods of joining are used. Substitution of welding for riveting saves the

² The Welding Engineer (Chicago), March 1944.

weight of the rivets and the necessary overlapping of plates, and the labor involved in making holes for the rivets is eliminated. For products in which airtight or liquid-tight seams are required, welding is the superior method of fabrication. In many uses welding is displacing bolting as a means of assembly. Welding is also competing with casting as a fabricating method. Units which ordinarily are cast in one piece can be built up instead by welding plates and other steel shapes together.

Growth in the use of welding is related to the trend of production in industries in which it finds greatest application, as well as to its displacement of other methods of joining metals. The extent of the use of welding in a particular industry is in turn dependent upon the functions which welding techniques perform in that industry. Welding applications can be divided into five main types: Maintenance welding, salvage welding, toolroom welding, construction welding, and production welding. Maintenance welding may be found in any industry in which the repair of metal parts is carried on, and in many localities throughout the country there are independent repair shops specializing in welding repairs. Frequently, when welding is used as a repair process, the welding is done not by welders but by other workers such as machinists or automobile mechanics. In its salvage function, welding is used to reclaim for use in production defective castings and other parts which would otherwise be scrapped. Thus, this application would be found mainly in certain metalworking industries. Welding is used in tool and die shops in the making of jigs and fixtures. The use of welding as a construction tool is limited mainly to pipe-line construction and to structures made at least partly of metal. In production welding the process is simply used as one of the steps in the fabrication of the final product of a manufacturing plant. Of these five functions of welding, production is the most important from the viewpoint of the employment outlook for welders. Maintenance work creates a substantial and relatively stable demand for welding, but the potential expansion of the use of welding is more dependent upon its application in production processes.

Welding employment before the war was distributed among a large number of industries because of the widespread use of welding in maintenance. The greater part of the employment, however, was concentrated in a relatively few industries—automobiles, machinery, miscellaneous iron and steel products, electrical equipment, ships and aircraft—which use welding in production as well as in maintenance and other functions. Data from the Census of Population, presented in table 1, show for March 1940 the distribution of the 121,000 employed male welders, by industry.

Machine welders constitute the larger group of the welders employed in automobile manufacturing, especially in the production departments. Many of the hand welders are employed in the maintenance departments and in the tool shops (making jigs and fixtures). Various automatic resistance-welding machines are used in many phases of the body assembly, as well as in such components as gas tanks and mufflers. Even when arc welding is used it is often done by automatic arc-welding machines, which eliminate the need for skilled hand welders. Hand welding is used in production chiefly on parts difficult to reach.

TABLE 1.—*Employment of Male Welders and Flame-Cutters, by Industry, March 1940*¹

Industry	Number employed ²		Male welders and flame-cutters as per cent of total employment in each industry ³
	Number	Percent of total	
All industries.....	121,380	100.0	0.3
Manufacturing industries.....	89,120	73.4	.8
Blast furnaces, steel works and rolling mills.....	9,980	8.2	1.8
Miscellaneous iron and steel industries.....	16,420	13.4	2.4
Miscellaneous machinery.....	11,100	9.2	2.0
Agricultural machinery and tractors.....	1,720	1.4	1.9
Electrical machinery and equipment.....	4,520	3.7	1.2
Miscellaneous nonferrous-metal products.....	1,280	1.1	1.1
Automobiles and automobile equipment.....	18,280	15.1	3.2
Aircraft and parts.....	2,020	1.7	1.9
Ship and boat building and repairing.....	9,000	7.4	5.9
Railroad and miscellaneous transportation equipment.....	1,280	1.1	2.8
Furniture and store fixtures.....	1,720	1.4	.8
Petroleum refining.....	1,700	1.4	.9
Miscellaneous chemical industries.....	1,480	1.2	.4
Other manufacturing industries ⁴	8,620	7.1	.1
Nonmanufacturing industries.....	31,220	25.7	.1
Construction.....	4,560	3.7	.2
Railroads (including repair shops).....	5,300	4.4	.5
Gas works and steam plants.....	1,100	.9	1.3
Crude petroleum and natural gas.....	1,860	1.5	1.0
Miscellaneous repair services and hand trades.....	10,180	8.4	6.3
Automobile storage, rental, and repair services.....	1,620	1.3	.3
Other nonmanufacturing industries ⁵	6,600	5.5	(*)
Industry not reported.....	1,040	.9	.1

¹ Excludes those employed on public emergency work. Data are from the Census of Population: 1940, The Labor Force (Sample Statistics), Occupational Characteristics.

² The distribution of welding employment by industry is based on a 5-percent sample of Census returns. The total is therefore slightly different from the total shown in table 2, of 122,688 employed male welders and flame-cutters, which is based on a complete count of Census returns. In addition, there were 2,053 female welders and flame-cutters employed, but no data on their distribution by industry are available.

³ Total employment in each industry includes proprietors, managers, and officials, as well as wage and salary workers.

⁴ Includes all manufacturing industries which employed fewer than 1,000 welders and flame-cutters and manufacturing industries not elsewhere classified.

⁵ Includes all nonmanufacturing industries which employed fewer than 1,000 welders and flame-cutters.

(*) Includes less than a tenth of 1 percent.

A common use of welding in machinery production is in fabricating the bases and frames of the machines, where welding often replaces castings. Among the machinery industries, construction machinery makes the greatest use of welding in production. Welding is also an important occupation in the manufacture of blowers and fans, industrial cars and trucks, oil-field machinery, and mining machinery.

Welding is of considerable importance in the manufacture of electrical appliances but most of the welders are resistance machine welders. Hand welding is moderately important in the manufacture of electrical generating and distributing equipment.

The industrial distribution of welding employment is reflected in the geographical location of welders in 1940. It is evident from table 2 that the employment of welders is concentrated in the industrial Middle Western and Middle Atlantic States, with large numbers also employed in California and Texas. Some welders and flame-cutters were reported in every State, however, showing the influence of the demand for welders in maintenance work.

TABLE 2.—*Employment of Male Welders and Flame-Cutters, by Region and State, March 1940*¹

Region and State	Number employed	Percent of total	Region and State	Number employed	Percent of total
United States.....	122,688	100.0	South Atlantic—Continued.		
New England.....	6,292	5.1	Virginia.....	1,955	1.6
Maine.....	547	.4	West Virginia.....	1,329	1.1
New Hampshire.....	244	.2	North Carolina.....	470	.4
Vermont.....	88	.1	South Carolina.....	459	.4
Massachusetts.....	3,783	3.1	Georgia.....	918	.7
Rhode Island.....	273	.2	Florida.....	683	.6
Connecticut.....	1,357	1.1	East South Central.....	4,109	3.3
Middle Atlantic.....	26,095	21.2	Kentucky.....	1,015	.8
New York.....	8,235	6.7	Tennessee.....	1,248	1.0
New Jersey.....	4,678	3.8	Alabama.....	1,285	1.0
Pennsylvania.....	13,182	10.7	Mississippi.....	561	.5
East North Central.....	47,569	38.8	West South Central.....	8,765	7.1
Ohio.....	12,189	9.9	Arkansas.....	413	.3
Indiana.....	5,255	4.3	Louisiana.....	1,378	1.1
Illinois.....	9,344	7.6	Oklahoma.....	1,628	1.3
Michigan.....	16,636	13.6	Texas.....	5,346	4.4
Wisconsin.....	4,145	3.4	Mountain.....	2,282	1.9
West North Central.....	8,049	6.6	Montana.....	280	.2
Minnesota.....	1,466	1.2	Idaho.....	238	.2
Iowa.....	1,567	1.3	Wyoming.....	225	.2
Missouri.....	2,782	2.3	Colorado.....	628	.5
North Dakota.....	105	.1	New Mexico.....	248	.2
South Dakota.....	125	.1	Arizona.....	273	.2
Nebraska.....	480	.4	Utah.....	317	.3
Kansas.....	1,524	1.2	Nevada.....	73	.1
South Atlantic.....	8,465	7.0	Pacific.....	11,062	9.0
Delaware.....	359	.3	Washington.....	1,567	1.3
Maryland.....	2,140	1.7	Oregon.....	676	.6
District of Columbia.....	142	.1	California.....	8,819	7.2

¹ Census of Population: 1940, Volume III, The Labor Force, Reports by States, Parts 2 to 5. Excludes those employed on public emergency work. These data are based on a complete count of Census returns, and the total is therefore slightly different from the total shown in table 1, of 121,380 male welders and flame-cutters employed (except on public emergency work), which is based on a 5-percent sample of Census returns.

Wartime Employment of Welders

The phenomenal expansion in the use of welding as a production tool, brought about by war production demands, resulted in a tremendous increase in the employment of welders. By the end of 1943, the high point of employment in munitions industries, the estimated number of welders and flame-cutters had risen to a peak of 364,000—about three times the total of 124,700 shown by the 1940 Census. The nature of wartime production requirements accentuated the importance of hand welders in comparison with machine welders. Of the estimated total welders and burners, about 290,000 were hand welders using electric-arc or acetylene-gas equipment. Operators of welding machines (spot, butt, flash, etc.) numbered about 26,000, and burners comprised the remaining 48,000. These wartime totals represent a much greater relative as well as absolute increase over peacetime figures for hand welders and burners as compared to the machine welders. The magnitude of the wartime increase in welding employment has established hand welding as the largest single skilled occupational specialty in the metalworking field.

The urgent wartime demand for welders, coupled with the general shortage of manpower, enabled women to take over a large number of the welding jobs. Women were also relatively better qualified to meet the physical demands of welding work than they were for many other

jobs. In December 1943, it is estimated that women constituted about 15 percent of the total employment of welders and burners. This percentage was undoubtedly increased during 1944. Thus welding represented a major occupational opportunity for women in the war period. The largest numbers of women welders were engaged in hand welding, although the ratio of women to men was greater in resistance-welding jobs.

The remarkable growth of welding employment during the war was attributable primarily to the extensive use of welding in ship construction. Some new applications of welding in other fields and the general high level of production of metal goods also stimulated a demand for welders, but shipbuilding was by far the major cause of the expansion of welding employment. The result was that the high wartime employment of welders was based mainly on two related factors—the large-scale acceptance of welding methods in ship construction, and the importance of the ship-construction program to the United States war effort.

The data presented in table 3 showing the industrial distribution of welding employment in the war period clearly indicate the effect of the shipbuilding demand. An estimated total of 180,000 welders and burners was employed in public and private shipbuilding in December 1943, as compared with 9,000 shown by the Census in 1940—an increase of 1,900 percent. The welders and burners employed in shipbuilding constituted almost half of the total employment of welders and burners, and the increase in shipbuilding accounted for over 70 percent of the total increase.

A sharp gain in employment of welders in the manufacture of aircraft and aircraft engines was also shown. The 16,000 welders shown for the aircraft category do not account for all the welders actually employed in production of aircraft and parts during the war. The industries shown in the table are classified on the basis of their prewar product, so that the production of aircraft in converted plants is covered in other industries. The many welders employed on ordnance production in converted plants are included under several different categories, principally iron and steel, automobiles, and machinery. The welders in new ordnance plants and Government arsenals are covered under the iron and steel group. Plants comprising the prewar automobile industry showed a comparatively small increase in the number of welders employed. This was principally because the production of passenger automobiles, which had required large numbers of welders, was virtually eliminated. The welders in the converted automobile plants were engaged in the production of military tanks and other ordnance items, army trucks, aircraft parts, and aircraft engines.

Developments in recent years have established welding as the principal method of joining, in the construction of steel ships, it having almost completely displaced riveting and other techniques for this purpose. Figures from prewar and wartime surveys of shipbuilding employment show strikingly the growing importance of welders in shipbuilding. In August 1936, 4.3 of the total production and supervisory workers in shipyards were welders, whereas in June 1943 their number had increased to 9.7 percent of the total.³

³ See *Employment in the Shipbuilding Industry, 1935-43*, in *Monthly Labor Review*, May 1944.

TABLE 3.—*Employment of Welders and Burners (Flame-Cutters), by Industry, March 1940 and December 1943*

Industry ¹	Number employed			Percent of increase, March 1940 to December 1943
	March 1940 ²	December 1943 ³		
		Number	Percent of total	
All industries.....	124,741	364,000	100.0	192
Manufacturing industries.....	89,120	331,000	91.0	271
Iron and steel and their products group ⁴	26,580	46,000	12.6	73
Electrical machinery group ⁵	4,520	12,000	3.3	165
Machinery, except electrical, group ⁶	13,080	26,000	7.2	99
Transportation equipment, except automobiles, group.....	12,300	204,000	56.1	1,558
Aircraft and parts, including aircraft engines.....	2,020	16,000	4.4	682
Shipbuilding and ship repair, private and public.....	9,000	180,000	49.5	1,900
Other transportation equipment ⁷	1,280	8,000	2.2	525
Automobiles group ⁸	18,280	24,000	6.6	31
Other manufacturing industries.....	14,360	19,000	5.2	32
Nonmanufacturing industries ⁹	31,220	33,000	9.0	6

¹ Industries classified by principal 1939 product.

² Excludes those employed on public emergency work. Data are from the Census of Population: 1940. The total for all industries is from Volume III, The Labor Force, Part 1: United States Summary. It is based on a complete count of Census returns and includes 2,053 employed female welders and burners (flame-cutters). Data on employment of welders and burners by industry are from The Labor Force (Sample Statistics), Occupational Characteristics, which is based on a 5-percent sample of Census returns and which excludes female welders and burners and 1,040 male welders and burners for whom the employing industry was not reported. Therefore, the number of employed welders and burners shown by industry does not add up to the total of employed welders and burners in all industries.

³ Estimates prepared in the Occupational Outlook Division of the Bureau of Labor Statistics.

⁴ In 1943, includes Government manufacturing arsenals, ordnance production in new plants, and ordnance and other war production in converted plants, as well as production of the 1939 products.

⁵ In 1943, includes ordnance and other war production in converted plants, as well as production of machinery.

⁶ Includes locomotive and railway-car plants, and for 1943, also includes military tank production in new plants and military tank and other war production in converted plants.

⁷ In 1943, includes aircraft engines, aircraft parts, military tanks, and ordnance production in converted plants, as well as production of automotive vehicles.

⁸ Includes construction, transportation, service, and other nonmanufacturing industries.

The importance of welding in ship construction varies with the type of ship. A study of the workers in private shipyards in June 1943 ³ revealed that welders were relatively most numerous in yards building tankers; there 15.1 percent of the total employed in production and supervisory jobs were welders. The next highest percentage of welders was found in the building of landing craft, with 12.0 percent, followed by Liberty cargo vessels with 11.3 percent. Welders were least important in repair yards, accounting for only 4.7 percent of the total workers.

Of the total of 180,000 welders and burners employed in shipyards in December 1943, a little over one-fifth were burners. Most of the welders were hand welders, the exception being the operators of automatic arc-welding machines, which have been extensively used in shipbuilding.

Welding has been used for many purposes in aircraft manufacture, mainly in the production of parts and subassemblies rather than in the final assembly of the aircraft. Landing gear, engine mounts, fuel tanks, and bomb bays are examples of aircraft components in which welding is used.

Welding found many uses in ordnance production, especially in tanks, which are now all-welded. Important applications were also

³ See Employment in the Shipbuilding Industry, 1935-43, in Monthly Labor Review, May 1944.

made in such items as bomb casings, depth charges, and heavy gun mounts, as well as in others too numerous to detail.

The increases in the welding labor force indicated by the threefold increase in employment was achieved through one of the largest training programs ever attempted. An estimated 1,500,000 received some welding training during the war years July 1940–December 1944. A great many of these trainees were actually paid while learning welding in schools maintained in shipyards and factories. The discrepancy between the large number of persons enrolled in welding courses and the estimated peak employment of welders and burners is accounted for mainly by turn-over and the failure of many trainees actually to take or remain at welding jobs.

The greatly expanded use of welding during the war also stimulated the development of new equipment and methods. These developments tended in many cases to reduce the skill required for welding jobs. This reduction was achieved partly through the ability of many producers to break down some of the welding operations under conditions of quantity production.

The great importance to welding employment of such industries as shipbuilding and aircraft has resulted in a considerable shift in the distribution of welding jobs among geographical areas. Largely because of the influence of these war industries, a very large proportion of welder employment during the war was in the coastal States, while in the Middle West welding jobs showed a smaller increase.

Postwar Employment Outlook for Welders

FACTORS AFFECTING THE OUTLOOK

The spectacular increase in the employment of welders during the war and the publicity given to new welding methods and broadened applications in industry have drawn attention to the probable number of postwar welding jobs. Because of the importance of such information in vocational guidance of both returning veterans and high-school students, it is essential to evaluate the principal factors which affect the postwar employment opportunities for welders.

Certain factors stand out as determinants of the number of postwar welding jobs. First is the question of the future changes in the relative use of welding in industry as affected by the continued development of new welding techniques and by increased acceptance and utilization of welding in production. Second, and perhaps more important, is the magnitude of the employment and the direction of the postwar trends in the industries which will probably be the chief users of welding. From the point of view of vocational guidance, a highly significant trend will be the relative use of hand and machine methods of welding, a trend which will be affected by the relative importance of the industries using welding, as well as by advances in technique. Another main factor to be taken into consideration is the effect of improvements in welding methods on the man-hours of employment required to perform a given volume of welding—whether, in other words, they will result in substantial increases in the man-hour productivity of welders.

ADVANCES IN WELDING TECHNIQUES

A full consideration of possible gains in the use of welding would depend upon a complete and objective technical appraisal of welding methods and their points of advantage over other production methods. As indicated previously, welding has many advantages for certain uses and these have contributed to its steady and rapid growth. The influence of the war in hastening the eventual acceptance of welding for many purposes is difficult to measure precisely.

Many of the wartime applications of welding will decline in importance when the output of the products concerned is reduced. However, the manufacturers who gained additional experience in welding, or who installed welding equipment and were convinced of its advantages, will want to carry over welding into their peacetime production where feasible and profitable. The significance of this development cannot be ignored, yet it is easily possible to overstate the importance of many of the new applications that are anticipated for peacetime. In many cases the total volume of employment in the production of the items concerned will never bulk large, because the nature of the product is such that demand is definitely limited. In other instances, the proclaimed new use of welding is of such minute importance in the production process that the resulting new employment of welders can never be very large. A further limitation on the increased use of welding is the extensive use it has already achieved in many industries.

In the production process as now organized, welding can be used only at a certain number of points. Even in those industries in which welding has achieved its greatest use and in which no further large applications are expected, welders will remain only a small proportion of the total labor force, although they may in some cases constitute the largest single occupation. This indicates that even should welding become the principal method of assembly for many additional products, not all nor even a large proportion of the workers will be welders.

RELATIONSHIP OF WELDING TO OTHER INDUSTRIAL PROCESSES

With these limitations in mind, it still appears reasonable that there will be a further expansion in the use of welding in many industries. One of the main areas in which gains are expected by some observers is in competition with castings as components of many types of products. By taking basic metal shapes, such as plates and bars, and welding them together, so-called "weldments" can be fabricated to substitute for castings in many uses. It is not yet possible to generalize regarding the extent and timing of future displacement of castings by weldments. Whether castings or weldments are more efficient in a particular case depends upon such factors as the size and complexity of design of the part and the quantity to be produced. Even if weldments could be established as more efficient, there is considerable inertia to overcome. Many plants have large investments in foundry capacity, and savings from welding would have to be considerable to persuade them to abandon the foundry facilities and install expensive welding equipment. For the most efficient utilization of welding it is usually preferable that the design for the product be made specially for application of welding, and this would have to be

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done for countless products in order to achieve widespread displacement of castings. In view of these technical and economic uncertainties, it is most reasonable to assume, in projecting the use of welding, that weldments will be substituted gradually for castings in many fields, but that a substantial displacement is only a long-run possibility and not at all assured.

Welding will also be in competition with plastics and with the stamping and pressing of sheet metal, but in these instances it is more likely that welding may be affected adversely. Plastics compete with metal products generally, and a large increase in their use could cut into the requirements for welding. The development of methods of stamping larger sections of sheet metal tends to reduce the need for welding in joining smaller units in assembly of many products.

PROSPECTIVE USE OF WELDING IN PARTICULAR INDUSTRIES

An appraisal of the outlook for welding employment is best approached by considering the possibilities in specific industries in which welding is either actually or potentially important. The automobile industry was the largest employer of welders before the war, but employment of them showed much less of an increase during the war than was the case in many other industries, mainly because its normal product was so drastically curtailed. Welding had already achieved a high degree of utilization in automobile production before the war and the possibilities for future expansion are more limited than in other fields where welding was less widely used. The postwar volume of welding employment in this industry will thus be more closely related to its general level of employment. Automobile production is expected to be at high levels for at least several years after the war and may then settle down to a long-run level higher than that immediately prior to the war, if economic conditions are at all favorable. The net result is an indicated moderate increase in welding employment in the automobile industry.

The use of welding varies considerably among the different machinery industries. In many of them there are possibilities for some extension of welding applications. There are definite limits, however, upon the extent of welding in machinery assembly, because of the necessity to provide for moving parts and for ready disassembly of the machine for repairs. One of the main possibilities for increased use of welding lies in the substitution of weldments for castings in such parts as bases, frames, and gears.

There are few industries in the iron and steel group in which a substantial increase in welding can be anticipated. Industries such as fabricated structural steel and boiler shops already make heavy use of welding and will continue to do so. In other industries, however, such as the manufacture of castings, forgings, tin cans, and screw-machine products, the nature of the product precludes significant increases in the utilization of welding.

One of the fields in which welding is likely to have greater use is the manufacture of railroad cars. However, this industry has already been using welding extensively during the war in producing tanks, and any increase over wartime levels in the number of welders employed may be small.

Some opportunities in welding, both for self-employment or as an employee, may arise through the establishment of additional small

welding repair and job shops. The prospects for successful operation of this type of business depend upon such factors as the competition and the potential demand for welding services in the particular community in which the shop is to be located. The proprietor of a small welding shop should possess a combination of all-round welding skill and business ability. There will probably be some continued expansion in this field after the war, but there are limits to the need for such service, and a substantially increased volume of employment cannot be expected.

One of the principal activities which should employ more welders after the war is building construction. Welding is being more extensively used in the erection of metal structures, and the volume of construction after the war is expected to be at very high levels. Much of the construction activity anticipated, however, will be in residential housing, which will probably make but small use of welding.

The industries thus far enumerated are peacetime industries with established civilian markets. The outlook for welding employment in the war industries, which have been important users of welding, is for a considerable decline. A definite drop in the number of welding jobs in aircraft production seems clearly indicated. The steady rise in the importance of welding in aircraft, combined with the fact that many types of planes for civilian use are more suitable for welded fabrication than most of the military planes, indicates that the percentage of aircraft workers who will be welders may be even higher after than during the war, but even the most optimistic predictions do not show postwar aircraft employment as more than a small fraction of the wartime peak. The use of welding in the production of tanks and other ordnance will, of course, also be reduced, consistent with the relatively low level of activity in that field after the war.

The industry of crucial importance to postwar welding prospects is shipbuilding, the industry which accounted for almost half of the wartime welder employment. There is definite possibility that the relative importance of welders among shipyard employees may be reduced, because of the elimination of a great deal of the wartime mass production of ships, and because ship repair, which uses fewer welders, will be a larger proportion of shipyard activity. Moreover, total shipbuilding employment will fall far below the wartime level. The possible extent of the decline may be indicated by the fact that the number of wage earners employed in private shipbuilding averaged only 69,200 in 1939 compared with a figure of 1,284,900 in December 1943. No specific forecast of postwar shipbuilding employment has been made in connection with the present study, but to illustrate the effects upon the number of welding jobs of the prospective drop in ship-construction work, the average employment—224,000—in a high prewar year, 1941, may serve as an assumption as to the level of employment that will be reached several years after the war. If shipbuilding employment does stabilize at about that level, it will mean an extremely large reduction in the number of welders required in shipyards—so large that it will dominate the outlook for welders.

GENERAL PROSPECTS FOR WELDING EMPLOYMENT

The net effect of the anticipated decrease in welding employment in shipbuilding, combined with varying trends in other industries, is a

postwar employment estimate for welders amounting to considerably less than the wartime figure. This conclusion is based upon a detailed appraisal of the outlook for welding employment in specific industries, in which the assumptions as to both the use of welding and the postwar level of total employment in each of the industries were relatively favorable. The estimate covered two periods, one immediately following the completion of reconversion and the other relating to an assumed full-employment economy which, it was assumed, would be attained between 5 and 10 years after reconversion. For the immediate postwar period following reconversion, the indicated employment of welders and burners was about 200,000, compared with the wartime peak of 364,000. Even under the assumed full-employment situation, the number of welders and burners would be considerably less than the wartime figure. The principal factor underlying the relatively unfavorable prospects for welding jobs is, as already noted, the drastic reduction in the number of welders in shipbuilding, which more than offsets increases expected in other fields.

EFFECTS OF TECHNOLOGICAL ADVANCES UPON REQUIREMENTS FOR WELDERS

The total demand for welding is indicated by the anticipated use of welding among industries and their volume of employment. Still another factor, however, may influence considerably the actual number of jobs for welders. A great many welding improvements have as their objective the reduction either of the number of welders required for a given volume of welding or the degree of skill required, or both, and it is likely that the degree of future acceptance of welding as a method of fabrication in many industries is related to—perhaps even contingent upon—the cutting of the welder man-hours required in production. Prominent among these innovations are automatic arc and acetylene-welding machines, which are being applied to an increasing number of production processes. Their main usefulness is in situations involving large quantities. A typical use is the welding of long lengths of steel plate in ship construction. The large mechanical positioners, which revolve the work piece so that all the welding can be done in the easier and faster downhand position, eliminate both some of the welder jobs and a portion of the skill required.

A considerable reduction in man-hour requirements is possible through the use of automatic arc-welding machines and positioners. The experience of one company engaged in constructing welded steel cargo vessels has been that, in certain types of welding, 7 feet of weld can be laid in the time that it takes to weld 1 foot by using manual methods. The use of positioners to place the work for flat horizontal welding has reduced the time required for some welds as much as 50 percent.

POSTWAR SUPPLY OF WELDERS

In order to obtain a balanced judgment as to employment opportunities for welders in general and the prospects for newly trained welders in particular, the indicated postwar reduction in the number of welding jobs must be related to the probable supply of experienced welders. The number of jobs for hand welders will be considerably less than the number at the wartime peak. This might in itself create a presumption of an oversupply of welders. Some of the people who

held welding jobs during the war may not, however, be candidates for postwar welding jobs. This applies to many of the women who entered the occupation, as well as to many men who left their usual occupation to take war work and to those welders who will retire from the occupation because of death, old age, or changing to another occupation.

The possibility of such withdrawals would be a factor tending to reduce the postwar supply. The peak war employment of welders, however, does not measure the total number of people who worked as welders during the war, because it applies only to one period. Many experienced welders who worked at some time during the war were drafted; other turn-over also added to the number who held welding jobs. The estimated total of 1,500,000 persons who received at least a superficial introduction to welding indicates the magnitude of the wartime labor force, although many may not have actually worked at welding for a sufficient period of time to qualify as experienced welders.

The general picture perhaps should be modified to some extent to consider separately the outlook for fully qualified, all-round welders when industries change over from the production-line methods used for large-scale war production to the making of a variety of goods in small quantities. This factor, combined with the limited qualifications of many of the war-period welders who received brief training or who worked at fairly simple repetitive tasks, may imply relatively more favorable prospects for the more highly skilled workers.

Several other factors, however, may limit the need for additions to the skilled welding labor force. Many of the wartime developments resulting in the break-down of welding jobs into less-skilled duties may persist, particularly if a continuation of this trend should be a requirement for expanding the use of welding in some industries. There are also potential pools of skilled labor supply, not previously discussed, which may enter the picture. These consist largely of supervisory workers, many of whom may be forced to accept skilled production jobs if they lose their war jobs and cannot get supervisory jobs in other industries. In shipbuilding alone there were at least 15,000 to 20,000 welding supervisors, including leadmen and foremen, at the war peak, and this source may be drawn upon to fill a large part of the demand for all-round hand welders. These workers are not included in the December 1943 employment estimate of 290,000 hand welders.

EMPLOYMENT OPPORTUNITIES IN WELDING

The balancing of the probable postwar supply of welders against the probable demands of industry leads to the conclusion that the employment opportunities in hand welding for persons without welding experience will be relatively unfavorable for a number of years after the war. This situation also applies to a large proportion of the wartime welders, whose jobs have been highly specialized, and who may find that their welding experience is not readily transferable to many types of peacetime jobs.

Replacement of workers who leave the occupation because of death or retirement probably will not provide a substantial number of job opportunities in welding for many years. Most of the welding labor force is relatively young in contrast to many other occupations having

large proportions of workers in the older age groups in which retirement and death more frequently create job vacancies. Only 16 percent of the employed welders were over 44 years old, at the time of the 1940 Census, compared to over 50 percent in such occupations as carpenters, blacksmiths, and boilermakers.

The nature of the postwar demand for welding employment is likely to result in relatively more favorable opportunities for machine welders than for hand welders. Many of the new welding developments are in the field of resistance-machine welding. In addition, this type of welding is used extensively in the manufacture of many consumer goods—for example, automobiles, refrigerators, electrical appliances—the production of which will be at high levels after the war. During the war the importance of shipbuilding as a source of demand for welding stimulated the employment of arc welders. The prospective greater importance of machine welding among postwar welding jobs is significant from the viewpoint of vocational guidance, because the resistance types of welding do not require preemployment training, a short period of on-the-job training usually being sufficient.

The readjustments related to reconversion from war production will involve considerable shifts in the geographical location of welding employment. The number employed in coastal States, where shipbuilding and aircraft have been important during the war, will be substantially reduced, whereas the Midwest industrial areas should increase their proportion of welding employment, although the actual number of welding jobs in these localities may be no larger than the wartime total.

Training of Welders

Training courses for welding are largely restricted to the teaching of hand-welding methods. Operation of resistance-welding machines is usually learned quickly on the job.

Before the war, the objective of training programs was usually to produce all-round welders, but it was generally considered that the graduates of these welding courses needed a period of work experience before they could actually qualify as such. About 200 hours of welding instruction ordinarily constituted the training programs operated by many industrial companies and served as a standard suggested for trade and vocational schools.

In order to standardize and regulate the scope and quality of training provided for welding, the American Welding Society has sponsored a Code of Minimum Requirements for Instruction of Welding Operators. The first part of this code covers the arc welding of steel $\frac{3}{16}$ to $\frac{1}{2}$ inch thick, and its objective is to provide standards for courses which would produce, not an experienced operator, but one with "enough skill and knowledge so that he will have immediate value to industry as an operator on less-difficult work, and will be able, by gaining experience, to progress rapidly to work of greater difficulty and responsibility."⁴

According to the code, a minimum of 150 hours should be devoted to actual welding, exclusive of time spent in witnessing demonstrations, preparing plates, and testing specimens, and not less than 20 hours to instruction in welding theory.

⁴ Published in tentative form in 1942 and as a standard in 1945. The American Welding Society has, in addition, issued a code applicable to instruction for oxyacetylene welding of steel aircraft. Codes are being prepared relating to training for other operations.

Students must pass a specified series of qualification tests (before completing the course), consisting of actual applications of welding, with the requirement that sound welds of various types be produced.

The code also covers the equipment and facilities that should be furnished by the school, in addition to the qualifications and duties of the instructors.

The urgent wartime requirements for a large number of welders to do specialized work resulted in a series of training programs whose scope and length were below the standard of the American Welding Society. These courses have turned out welders able to begin on simple welding jobs, such as tack welding, after 30 hours of instruction, although the training period usually covered about 120 or 130 hours. Between July 1, 1940, and December 31, 1944, approximately 1,500,000 individuals, of whom about 1,100,000 were enrolled in courses sponsored by the U. S. Office of Education, are estimated to have received some instruction in welding, principally in electric-arc welding.

After the war, courses will continue to be given in public and privately operated trade schools. Before taking a course in a private school, the prospective trainee should check on the quality of the instruction offered. Local and State directors of vocational education are good sources of information on this point, and also on the opportunities for instruction in public vocational schools. It should be ascertained whether the school meets the minimum standards provided in the code of the American Welding Society. The local section of the society may be able to provide such information.

In general, welding has not been considered an apprenticeable occupation, although some industrial firms have provided a small number of formal apprenticeships of 3 to 4 years' duration, mainly to train maintenance welders. The Federal Committee on Apprenticeship has viewed welding as a tool of many trades, rather than as a separate trade, and, for that reason, has registered no welding apprenticeship programs.

The skill rating of welders depends to a large extent upon the welding qualification tests they have passed. Qualification procedures have been established by the American Welding Society, the U. S. Bureau of Marine Inspection and Navigation, private insurance companies, and other agencies. In addition, licenses are often required for certain types of construction work in some localities.

The main aptitudes required to be a successful welder are manual dexterity and general dependability. (Physical strength is not so important a factor as in many other types of metal assembly work.) Dependability is essential because it is often difficult to inspect and judge the finished weld and a poor weld, may result in a failure of the complete product at a critical time.

Wages and Working Conditions

WAGES OF WELDERS

The wages of welders are comparable to those of other metal-working occupations requiring equivalent skill and training. A study of straight-time earnings in 18 machinery industries in 1938 and 1939 showed that hand welders averaged 82 cents an hour,

which was lower than the earnings of most of the skilled machine-tool operators but higher than those of semiskilled machine operators.⁴ In 1940, hand welders in automobile-manufacturing plants were paid average straight-time wages of \$1.03 an hour, which was higher than machine-tool operators' earnings and about the same as the wages of skilled repairmen.⁵

During the war the hourly earnings of welders increased greatly, in accordance with the general advance in wages. As shown in table 4, welders' earnings reached particularly high levels in shipbuilding, a high-wage industry. In the fall of 1942, straight-time hourly earnings of first-class welders in Atlantic coast ship-construction yards averaged \$1.52 and those of other classes, \$1.17. Hourly earnings in Pacific coast shipyards were somewhat lower, with first-class welders averaging \$1.20 and other classes \$1.07. On the Atlantic coast, first-class welders were among the highest-paid workers, but on the Pacific coast many occupations earned more than the first-class welders. This geographic difference, which is in contrast to the generally higher wage level of Pacific coast yards, may be explained primarily by the prevalence of incentive-pay systems in Atlantic coast ship-construction yards.

In most of the machinery industries employing substantial numbers of welders, male first-class welders in 1942 earned slightly over \$1.00 an hour on the average, ranging from \$1.28 in the communication-equipment industry to \$0.94 in textile-machinery plants. However, it is important to note that industry averages conceal major variations among plants within each industry.

In the machinery industries, the earnings of first-class welders tended to approximate those of first-class turret-lathe operators and bench assemblers.

TABLE 4.—*Wartime Earnings of First-Class Hand Welders¹ in Selected Industries²*

Industry, and year of study	Average hourly earnings ³	Industry, and year of study	Average hourly earnings ³
Transportation equipment (except automobiles):		Machinery, except electrical (1942): ⁴	
Ship construction, private (1942):		Construction machinery.....	\$1.01
Atlantic Coast.....	\$1.52	Oil-field machinery.....	1.07
Pacific Coast.....	1.20	Mining machinery and equipment..	1.00
Ship repair, private (1943):		Tractors.....	1.15
Atlantic Coast.....	1.20	Internal-combustion engines.....	1.00
Pacific Coast.....	1.35	Machine tools.....	1.05
Aircraft engines (1943) ⁴	1.30	Machine-tool accessories.....	1.15
Metal airframes (1943).....	\$1.25	Miscellaneous metalworking machinery.....	.97
Electrical machinery:		Textile machinery.....	.94
Generating, distribution, and industrial apparatus (1942) ⁵	1.25	Food-products machinery.....	.95
Electrical appliances (1942) ⁵	1.06	Refrigerating equipment.....	1.15
Communication equipment (1942)....	1.28	Miscellaneous industrial machinery..	1.01

¹ Males only, except in ship construction and ship repair, in which earnings of both males and females are included.

² Data are from studies by the Bureau's Division of Wage Analysis.

³ Straight-time earnings of day-shift workers.

⁴ Includes converted automotive engine and equipment plants.

⁵ Earnings of gas welders only.

⁶ Includes plants converted to war production.

⁷ See Earnings of Machine-shop Employees, 1938-39, in Monthly Labor Review, November 1940.

⁸ See Wage Structure of the Motor-Vehicle Industry, in Monthly Labor Review, February and March 1942.

WORKING CONDITIONS

The working conditions characteristic of the welding occupation result from two groups of factors: those inherent in the use of welding equipment and those associated with the various industrial processes in which welding is employed. In general, the working conditions peculiar to welding compare favorably with many other metalworking operations, but those arising from the industrial environment of welding vary greatly among industries.

Welding is accompanied by moderate physical strain, and, in many of its applications, by a marked degree of monotony. The welder must exert close attention and employ considerable muscular control to guide the arc or flame along the edges of the metal. In common with other metalworkers, he is subject to the noise and dust characteristic of metalworking establishments. Shipyards and construction projects are among the least favorable of welding environments, and machinery and automobile plants the most satisfactory.

The hazards of welding operations, apart from those peculiar to the various industries in which welding is employed, can be almost entirely avoided by the properly equipped and trained worker. The hazards of electric-arc welding include, principally, minor skin burns and "welders' flash" (a temporary eye injury) both of which are caused by exposure of the unprotected skin or the naked eye to the ultraviolet and infrared radiations of the arc; and, infrequently, electric shock, caused either by carelessness or by defective welding equipment. In oxyacetylene welding or cutting, there exists the possibility of explosion or fire, resulting from leaks in oxygen or acetylene lines, or from improper handling. Welding or cutting certain metals by any method may generate harmful fumes or gases, necessitating forced ventilation of the workplace or the wearing of respirators. Other common, but preventable, accident factors include spattering metal or slag, and the danger of fire. Resistance-welding operations are largely free from the hazards characteristic of the hand methods.

The prewar industrial distribution of welding employment shows that welding has been conducted principally in industries with relatively good safety records. The injury frequency and severity rates of the machinery and automobile industries, major peacetime employers of welders, have been markedly below the rates for all manufacturing. Among other important employers of welders, only the fabricated-structural-steel and boiler-shop products industries showed injury-frequency rates well in excess of the average for all manufacturing.

ILO Preparations for Paris Conference

By CARTER GOODRICH ¹

THE International Labor Conference will meet in Paris from October 15 to November 7. To it the United States will once more send a full delegation representing government, management and labor. The Conference represents the high point in the program of activity through which the International Labor Organization is attempting in this critical time to fulfill its responsibilities to its member nations and to the workers and employers of the world.² Its agenda is as follows:

- I. Director's Report.
- II. The maintenance of high levels of employment during the period of industrial rehabilitation and reconversion.
- III. Welfare of children and young workers.
- IV. Matters arising out of the work of the Constitutional Committee.
- V. Minimum standards of social policy in dependent territories.

The Conference will also perform its annual task of checking on the enforcement of conventions ratified by the various nations, and will renew the membership of the Governing Body and pass on the applications of Iceland and Italy for admission to the Organization. On the Governing Body, the United States Government has a permanent seat as one of the eight "States of chief industrial importance," but elections must be held to fill the eight other government seats and to choose the eight workers' members and the eight employers' members who give it its special character. Iceland, which formerly participated in ILO activities through its connection with Denmark, will no doubt be admitted without question. With respect to Italy which resigned from the Organization under the Mussolini regime, the Governing Body, acting on the initiative of the United States Government, has expressed the hope that the Conference will take favorable action in order to strengthen and encourage democratic forces in the rebuilding of the nation.

¹ United States Labor Commissioner, United States Department of Labor, and Chairman of the Governing Body of the International Labor Office.

² The extent and variety of this program may be indicated by the following timetable of meetings:

1945		
Jan.....	Joint Maritime Commission.....	London.
Jan.....	Governing Body, Ninety-Fourth Session.....	London.
Feb.....	Committee on Social Insurance in the Peace Settlement.....	London.
Feb.....	Committee on Accident Prevention.....	London.
May.....	Committee on the Welfare of Children and Young Workers.....	Montreal.
June.....	Governing Body, Ninety-Fifth Session.....	Quebec.
July.....	Committees on Social Insurance and on Continuity of Employment, Entry, Training and Promotion in the Maritime Industry.....	London.
July.....	Committee of Experts on the Application of Conventions.....	London.
Oct.-Nov.....	Governing Body, Ninety-Sixth and Ninety-Seventh Sessions.....	Paris.
Oct.-Nov.....	International Labor Conference, Twenty-Seventh Session.....	Paris.
Nov.....	Preparatory Maritime Conference.....	Copenhagen.
Nov.-Dec.....	Industrial Committees for Coal, Metal Trades, and Inland Transport.....	
1946		
Jan.....	International Development Works Committee.....	
"Early months".....	Maritime Session of the International Labor Conference.....	
Mar.....	Industrial Committees for Iron and Steel and Textiles.....	
Mar., Apr., or May.....	Third Conference of American States Members.....	Mexico City.
May.....	Industrial Committees for Building Trades and Petroleum.....	

European Reconstruction

The choice of the place of the Conference is significant. While the European war was in progress, the United States acted as host to Conferences of the ILO at New York and Washington in 1941 and at Philadelphia in 1944.³ Shortly after the liberation of France, however, the Governing Body enthusiastically accepted the invitation of the French Government to hold in Paris the first great meeting of an official international organization on the liberated continent. Among those who laid the final plans for this meeting were veterans of ILO work who had staunchly maintained its principles within the occupied countries—among them Senator Justin Godart of France; Paal Berg, Chief Justice of Norway; and the French labor leader, Léon Jouhaux, who came to the Quebec meeting of the Governing Body 6 weeks after his release from a German concentration camp. "The first session of the Conference to be held after the liberation of Europe" presents, as the International Labor Office pointed out, "an opportunity for a full exchange of views on the urgent social problems presented by the situation arising out of the war, particularly in Europe." Accordingly, the Director's Report will emphasize "the social problems of the immediate postwar period, with special reference to the liberated countries of Europe."⁴

Maintenance of Employment

In the Declaration of Philadelphia, the Conference recognized "the solemn obligation of the International Labor Organization to further among the nations of the world programs which will achieve * * * full employment and the raising of standards of living." The issue of employment takes a central place in the Conference agenda. After discussing the economic factors determining the general level of employment, the report presented by the Office will consider, first, the effects "of wartime changes in the structure and in the location of industry" (the problem of greatest interest to the United States) and second, the effect "of shortages in the supply of raw materials, productive equipment, transport, and special labor skills," the problem of greatest interest to the countries whose economic organization has been disrupted by actual warfare. The Conference discussion will be pointed toward the development of policies, both national and international, to maintain high levels of employment during the difficult period of rehabilitation and reconversion.

The Children's Charter

With the Paris Conference, the ILO begins an important 2-year task relating to the welfare of children and young workers. In the past, conventions or labor treaties prohibiting child labor and measures dealing with apprenticeship and vocational education have been important parts of the ILO program. The purpose of the Paris discussion is to establish the preliminary framework of a more comprehensive Children's Charter. As the International Labor Office

³ See *Monthly Labor Review*, July 1944 (p. 1): Results of International Labor Conference, by Carter Goodrich and John Gamba.

⁴ Memorandum on the Twenty-Seventh Session of the International Labor Conference (Montreal, 1945).

points out, "the war and the abnormal conditions of life resulting from it have greatly aggravated the social problems relating to children and young workers," but the permanent need is "for coordinated measures to insure for all children normal and healthy conditions of life which favor the full development of their talents and aptitudes and permit them to develop into workers enjoying equality of opportunity on their entering into employment." After further consultation with the nations and with other international organizations, the 1946 Conference will take final action by formal Recommendation or by Convention.

Social Policy in Dependent Territories

The Declaration of Philadelphia, after laying down general principles of labor and social policy, closes with the statement that "their progressive application to peoples who are still dependent, as well as those who have already achieved self-government, is a matter of concern to the whole world." The ILO has earned the right to make this statement by the past contribution of its "native labor" Conventions, which have done much to eliminate the most flagrant abuses of colonial labor, and by a comprehensive Recommendation adopted at Philadelphia applying to dependent territories a number of specific measures of labor protection. By decision of the Philadelphia Conference, this work is to be continued at Paris. On the basis of the replies of the United States and other Governments to a questionnaire prepared by the Office, the Conference will consider adoption of a further Recommendation containing specific proposals on wage policy, hours and holidays, employment and migration, "labor aspects of land policies," labor inspection, and industrial health and safety.

ILO and the United Nations

"We realize," said the ILO representatives at the United Nations Conference, "that it will be necessary to alter the Constitution of the ILO in order to provide the necessary links with the United Nations, and we are also in course of examining the constitutional changes necessary to enable us to do our own work better." These questions will come before the Conference on the basis of the work of the Governing Body's Constitutional Committee. On its recommendation the Governing Body in January 1945 unanimously affirmed the desire of the ILO "for association with the general international organization * * * on terms which will permit the International Labor Organization, with its tripartite character, to make its best contribution to the general effort * * * while retaining * * * the authority essential for the discharge of its responsibilities under its Constitution and the Declaration of Philadelphia."

The ILO representatives explained this resolution to a committee of the San Francisco Conference in the following terms:

The ILO needs and desires, within the new framework, enough freedom of action to discharge its responsibilities and particularly to assure that the voice which the workers and employers exercise in world affairs through the International Labor Organization remains a real one. It goes without saying that the tripartite form of organization, which has given the ILO its special character and its special strength, should be maintained. The ILO's direct relations with Governments should remain unimpaired. It should have access to the General Assembly and a position within the new Organization which will enable it to make an

effective contribution. The working out of this position may be left to the negotiations contemplated in the Dumbarton Oaks Proposals, and we are confident that the terms finally agreed on will be such as to permit the necessary freedom within the framework of coordinated effort.

The San Francisco Conference took no direct action with respect to the ILO, but adopted a general provision under which "the various specialized agencies, established by intergovernmental agreement and having wide international responsibilities" are to be brought into relationship with the United Nations by negotiation with the Economic and Social Council. At its Quebec meeting, the Governing Body instructed its Negotiating Delegation, consisting of three government representatives, three employers, and three workers, to stand ready for such negotiations as soon as the United Nations Organization is prepared to proceed with them. The Governing Body also decided to invite those nations which are signatory to the United Nations Charter but are not at present members of the ILO—of which the most important is the Soviet Union⁴—to send delegations of observers to the Paris Conference. At the same meeting, Miss Frances Perkins assured the Governing Body, on behalf of President Truman, that the United States would continue to take full part in ILO work, and added—

The President also hopes that the ILO will be able to pursue its activities in cooperative relationship with the proposed general organization of the United Nations, under arrangements providing sufficient autonomy to permit of its putting forth its greatest effort. * * * It is the settled policy of the United States Government to seek for the ILO a proper place within the framework of the coordinated effort of the United Nations. Under such arrangements, the President noted, the voices of industry and of labor as expressed through the ILO would continue to be real voices in the determination of world policy in all these matters of life and work.

Everyone concerned with the ILO shares the desire to establish as soon as possible this relationship with the United Nations Organization. The ILO cannot, however, mark time while these arrangements are being worked out. As the Governing Body has said, the Organization must "pursue with vigor and efficiency its indispensable work." In this spirit it has planned a vigorous program of activity and the full agenda of the Paris Conference.

⁴ The others are the Ukrainian Socialist Soviet Republic, the Byelorussian Socialist Soviet Republic, Paraguay, Guatemala, El Salvador, Nicaragua, Honduras, Syria, Lebanon, Saudi Arabia, and the Philippine Commonwealth.

Wartime Policies

Deferment of Western Railroad Employees¹

CITING the enormous and increasing traffic burden taxing the transportation facilities in the United States because of demands incident to the war in the Pacific, National Headquarters of Selective Service directed local boards to give special consideration to requests for deferment of western railroad employees in specified occupations. Railroads covered by this directive are those operating west of Lake Michigan, the Illinois-Indiana State line, and the Mississippi River.

The critical occupations are the following: Train and engine service: Engineers, firemen, conductors, brakemen, and switchmen, including switch foremen and yardmen. General transportation occupations: Train dispatchers, yardmasters, and telegraphers, including operators and towermen. Maintenance of equipment: Blacksmiths, boilermakers, carmen, car inspectors, electricians, machinists, molders, and sheet-metal workers, including foremen in these crafts. Signal department: Signalmen and signal maintainers.

The Selective Service also stated that the Office of Defense Transportation, the War Manpower Commission, the Railroad Retirement Board, and the railroad brotherhoods have initiated programs for the recruitment of men who can be released for employment on the western railroads, and the local boards have been advised to give full consideration to requests of registrants for permission to make such transfers.

British Control of Engagement Order, 1945

THE Control of Engagement Order (S. R. & O. 1945, No. 579) issued by the British Minister of Labor and National Service, was made effective on June 4, 1945, as a means of insuring the orderly reallocation of manpower during the period between the end of the war in Europe and the defeat of Japan.² Although Defense Regulation 58A, whereby a worker might be directed into any job in the United Kingdom, remained effective, it was the Government's intention to use the latter power sparingly and to depend on the new order providing for control of the engagement of labor to staff industry. According to the Ministry of Labor, the 1945 order represented a substantial step in the direction of relaxation of labor controls. Even the degree of control retained might be reduced progressively, by lowering the age limit to which the provisions were made applicable.

¹ National Headquarters of Selective Service, Press release S-60, June 25, 1945.

² Information is from Great Britain, Parliament, Statutory Rules and Orders 1945, No. 579; and Ministry of Labor and National Service, Press notice No. 12, London, May 28, 1945.

Adoption of the order enabled the Government to dispense with the Undertakings (Restrictions on Engagement) Order, 1941, applying to men of all ages in building and civil engineering, general engineering, installation, and maintenance and repair of electrical equipment. Certain provisions of the essential-work orders also became unnecessary, notably in shipbuilding, ship repairing, and coal mining. The Employment of Women (Control of Engagement) Orders, 1943, covering women between the ages of 18 and 40, were no longer needed. In addition, employers were freed from the requirement of applying for deferment of men born in 1914 or earlier, as the age for compulsory military service has been lowered to 30 years.

Groups Covered

To insure that persons (with special emphasis on young men and women) who were being released from their war jobs would enter service of national importance for the war or civilian needs, the order stipulated that certain specified classes of persons might be hired only through public or approved employment offices. Men who have attained the age of 50 years and boys under 18, who were formerly subject to controls, were exempted from the recent order. Control of the engagement of males between the ages of 18 and 50 years was retained. Regarding females, no change was made in the ages between which their employment might be controlled, namely 18 and 40 years. As already stated, the upper age limits may be reduced periodically for both sexes, thus narrowing the scope of compulsion to secure employment through particular channels.

Exceptions from Coverage

Important exemptions from coverage were made for (1) any woman having a child of her own, under the age of 14 years, who lives with her; (2) ex-service personnel who are exercising reinstatement rights or during their periods of paid leave following release from the services; (3) employment without pay; (4) part-time employment of not over 30 hours a week; (5) casual employment; (6) employment in agriculture, horticulture, or forestry, in England or Wales only; (7) employment as a fisherman or as a master or member of the crew of a fishing boat; (8) employment in a managerial capacity; and (9) employment in a professional, administrative, or executive capacity, other than in certain scarcity categories.

Nature of Controls

The engagement of workers was placed under control by prohibiting employers from seeking to hire employees by any means other than through a local office of the Ministry of Labor and National Service or an agency approved under the control order. An employer may not hire a worker other than a person referred by the agencies just mentioned, and workers are forbidden to take employments other than those to which they are so referred.

If the same employer wishes to reengage an employee, he is not required to proceed through a local office of the Ministry, provided (1) the period between termination and reengagement did not exceed

14 days (building and civil engineering excepted), (2) reengagement immediately followed a period of sickness which had caused termination of employment (in building and civil engineering, employment was required to be on the same site unless permission to transfer was obtained), and (3) employment was resumed on termination of any stoppage of work caused by a labor dispute.

In certain circumstances, an exemption certificate may be issued to an employer, enabling him to engage or seek to engage men and women in specified age groups, by advertising for their services.



Measures to Control Labor and Price Emergency in Japan¹

A SERIOUS scarcity of consumer goods and a huge reserve of surplus purchasing power in Japan, together with heavy investment of capital in munitions production and payments on war insurance claims, had caused so great an inflationary pressure by the end of June 1945 that drastic countermeasures were proposed by the Ministry of Finance in July. The Justice Ministry began a campaign against "black market" operations in food supplies, war materials, and labor. In order to "perfect the policy of controlled economy," wholesale arrests were planned to "stamp out black-market traffic in labor."

In spite of action to control the amount of currency in circulation, the total issuance of notes of the Bank of Japan had reached more than 26 billion yen at the end of June—marking a rise of 30 percent in the last 3 months, and of approximately 170 percent since January 1944. On July 20, 1945, the Minister of Finance proposed to fight further inflation by increasing indirect taxes, reducing Government expenditure, and controlling industrial capital through a tighter system of bank loans.

While the press exposed war profiteers and the factory owners living in safety in the country, the Ministry of Justice decided on nation-wide arrests of persons accused of profiteering. Brokers of war materials and persons distributing foodstuffs unlawfully were to be prosecuted by the Ministry of Justice. Other agencies were to compel the farmers to turn over more produce to the Government. A "more flexible" price control was recommended for certain daily necessities.

¹ Data are from Office of War Information, Foreign News Bureau, Items from Wire File, July 23, 1945, and various news digests.

Employment Conditions

Report and Recommendations of Retiring Secretary of Labor

IN HER final report—for the fiscal year ending June 30, 1945—Frances Perkins, Secretary of Labor since 1933, reviewed the work of the Department of Labor and the labor progress made not only in that year but in the 12-year period. Among the gains made for labor in that period, she cited the creation of a Nation-wide employment service; legal rights to union organization and collective bargaining; unemployment compensation, old-age benefits, aid for children and mothers, and blind persons, under the social-security system; abolition of child labor and the provision of a floor under wages and a ceiling on hours under the Fair Labor Standards Act, as well as minimum wage rates for workers on Government contracts over \$10,000 under the Public Contracts Act; provision of standards and training for apprenticeship; and a law to facilitate the provision of housing for workers. In addition great strides have been made in the extension and improvement of State labor legislation in many fields.

For the fiscal year, 1944-45, the Secretary listed the following accomplishments:

1. The intensive preparatory work on postwar employment problems and postwar work standards.
2. The prompt settlement of 80 percent of all the industrial disputes of the United States which by reducing the time element reduced the degree of interference with war and necessary civilian production.
3. The extension to all interstate industries of the 40-cent minimum wage during the period of general high wages and by the Industry Committee method.
4. The effective servicing of a variety of temporary war agencies, including the Manpower Commission, the War Labor Board, the War Production Board, the Office of Price Administration.
5. The preparation and documentation for the State Department for the San Francisco and Dumbarton Oaks meetings of United States materials relating to labor standards and labor economic problems in the world settlements.
6. The preparation of programs for the postwar employment, working standards for women, and plans for suitable reabsorption into peacetime industries.

The report discussed in detail the Labor Department's activities in the administration of the Fair Labor Standards and Public Contracts Acts and in recovering for workers the wages due them; accident-analysis and accident-prevention activities; work for uniform standards of labor legislation, carried on largely through State agencies, but using the annual Labor Legislation Conference convened by the Secretary as a medium of exchange of experience and formulation of recommended standards and improvements; study of wartime and anticipated postwar problems of children and youth, and continuance of the emergency maternity and infant-care program; studies of women's wartime status and future occupational opportunities;

assistance in the establishment of more uniform labor and working-conditions policies throughout the Government service; and assistance in maintaining good labor conditions for Mexican and Jamaican laborers imported to work in this country.

Recommendations of Secretary

Among the recommendations made by Secretary Perkins were the following:

The extension of unemployment insurance to groups not now covered, and more adequate benefits for those who are covered. This should be supplemented by special local, State, and Federal programs for needed public works to be put into operation as needed.

Abolition of wartime relaxations of child-labor laws and encouragement of young persons to return to school or continue there, rather than to seek employment.

Immediate liberalization of old-age retirement provisions, to accelerate the withdrawal of older workers from industry.

Safeguards against efforts to exclude particular groups of workers (such as women, especially married women) from industry, and to insure their equal treatment with other civilians. Also, "we should never permit a means test to be administered before an individual is offered a job."

Amendment of the Fair Labor Standards Act to make the Administrator the sole interpreter of the law, with authority to bring suits for wage claims, and enactment of a Federal statute of limitations providing a uniform period during which employees themselves may bring wage suits.

In the field of workers' education, continuance and expansion of the Department's clearing-house functions and promotional assistance.

Rejection of the proposed "equal rights" amendment, as jeopardizing all the protective measures for women as well as their common-law rights in the family relationship.

One part of the report renewed previous recommendations as to consolidation, in the Department of Labor, of all Government labor functions. These included (a) transfer to the Department of the U. S. Employment Service, "with bureau autonomy" (if unemployment compensation were also to be transferred, it should be as a separate bureau having equal status with the Employment Service); (b) merger of the general management functions of the National Labor Relations Board with those of other Labor Department bureaus, and of its legal staff with the Solicitor's Office, but the quasi-judicial and fact-finding functions of the Board to remain independent and not subject to review by the Department; abolition of the National War Labor Board as soon as conditions permit return to free settlement of disputes and wage terms by collective bargaining, and authorization to the Department of Labor to analyze the Board's reports and wind up any outstanding activities; absorption of functions of the Labor Division of the War Production Board by appropriate bureaus of the Department; and transfer, to the Department, of the Labor Force Project now being carried on by the Bureau of the Census. The Secretary opposed suggestions to transfer the Children's Bureau from the Labor Department, because of her conviction that "once removed from the Department of Labor the functions of the Bureau would be

dissipated and the Bureau disintegrated." She opposed also any attempt to return to the Department of Labor the Immigration and Naturalization Service, which has been in the Department of Justice since 1940. In her opinion the immigration and naturalization functions have little or no relation to the Labor Department, and might divert its officials from the Department's principal purpose ("to promote the welfare of wage earners") and retard its activities in the strictly labor field.



Wartime Changes in Agricultural Employment¹

Summary

THE tendency for agricultural employment to decrease in proportion to total employment was accelerated considerably during the war by the increased opportunities for nonfarm work. Despite a 9-percent reduction in the farm work force from the average for July 1935-39 to July 1944, farm production climbed to an all-time high, a third above the 1935-39 level. After the war, agriculture will again, as before the war, be faced with the problem of how to sustain employment and income at high levels. The key to many of agriculture's difficulties, as indicated by the Department of Agriculture, lies in the maintenance of full production and employment in the nonagricultural segments of the national economy.

Factors contributing to the extensive regional fluctuations in farm employment, other than the opportunities for nonfarm jobs, were changes in the farm employment structure and the volume and types of agricultural production. The greatest decline in farm employment occurred in the South Atlantic, East South Central, and West South Central States, areas which included more than half of the total farm employment. The only regional increase in farm employment was in the Pacific States, an area of large-scale farming and specialized crops, dependent to an exceptional extent on hired labor.

Wartime farm recruits were drawn mainly from the local population. Special groups of farm workers included laborers from Mexico, Jamaica, the Bahamas, Barbados, and Newfoundland, soldiers on leave, vacationists, high-school students, college girls, Japanese-Americans, and prisoners of war. Moreover, farm operators, who comprised about half of total farm employment, reported an appreciable increase in their work on other farms in addition to their own. An increase in the number of younger and older age groups further augmented the depleted farm labor force.

Changes in Number of Farm and Nonfarm Workers, 1940-45

Under the impact of the war, total employment in the United States climbed to unprecedented heights, but the increase took place in nonagricultural rather than in agricultural pursuits (table 1). Although farm production in 1944 was a third greater than the average for 1935-39, it was achieved with 9 percent fewer agricultural workers. Over a number of decades agricultural employment has progressively

¹ Prepared in the Bureau's Editorial and Research Division by Marilyn Sworzyn.

declined as a proportion of total employment. During the war this tendency has been accelerated considerably by nonfarm employment opportunities.

TABLE 1.—*Changes in Agricultural and Nonagricultural Employment, by Sex, March 1940–March 1945 and July 1940–July 1944*¹

Group	Employment (in thousands)		Percent of change, March 1940– March 1945	Employment (in thousands)		Percent of change, July 1940– July 1944
	March 1940	March 1945		July 1940	July 1944	
Total.....	45,060	50,830	+12.8	48,010	54,000	+12.5
Males.....	33,820	33,230	-1.7	36,680	35,410	-3.5
Females.....	11,240	17,600	+56.6	11,330	18,590	+64.1
Agricultural.....	8,510	7,290	-14.3	10,660	9,670	-9.3
Males.....	8,000	6,170	-22.9	9,410	7,520	-20.1
Females.....	510	1,120	+119.6	1,250	2,150	+72.0
Nonagricultural.....	36,550	43,540	+19.1	37,350	44,330	+18.7
Males.....	25,820	27,060	+4.8	27,270	27,890	+2.3
Females.....	10,730	16,480	+53.6	10,080	16,440	+63.1

¹ Based on data from Monthly Report on the Labor Force (U. S. Department of Commerce, Bureau of the Census, Washington), April 5, 1945. Figures of farm employment and related data in this and later tables are approximations based on sample data.

The Bureau of the Census reports indicate that the share of farm employment in the total employed labor force dropped from 22 percent in July 1940 to 18 percent by July 1944 (table 2). During this same 4-year period total employment rose 13 percent; nonagricultural workers increased 19 percent, as contrasted with a decrease of 9 percent in the number of farm workers. When measured from March 1940, a slack month and the first month of that year for which Census figures are available, agricultural workers as a proportion of the total dropped from 19 percent in March 1940 to 14 percent by March 1945.

TABLE 2.—*Percentage Distribution of Agricultural and Nonagricultural Employment, by Sex, March 1940 and 1945 and July 1940 and 1944*¹

Group	March—		July—	
	1940	1945	1940	1944
Total.....	100.0	100.0	100.0	100.0
Males.....	75.1	65.4	76.4	65.6
Females.....	24.9	34.6	23.6	34.4
Agricultural.....	18.9	14.3	22.2	17.9
Males.....	17.8	12.1	19.6	13.9
Females.....	1.1	2.2	2.6	4.0
Nonagricultural.....	81.1	85.7	77.8	82.1
Males.....	57.3	53.2	56.8	51.6
Females.....	23.8	32.4	21.0	30.4

¹ Based on data from Monthly Report on the Labor Force (U. S. Department of Commerce, Bureau of the Census, Washington), April 5, 1945.

The drain of the armed forces and of war industries on manpower was reflected in a 54-percent increase in nonagricultural female employment from March 1940 to March 1945, as contrasted with only a 5-percent rise in the number of nonagricultural male workers. The inducements to nonfarm work, together with the demands of the

military (despite the special deferment policies for farm workers), resulted in an even more pronounced shift in the proportions of male and female employment in agriculture. The number of male farm workers declined 23 percent during the 5-year period, whereas the number of female farm workers increased 120 percent. Women comprised only 6 percent of agricultural employment in March 1940, but this proportion had risen to 15 percent by March 1945. Considered in terms of July employment, when the number of farm workers is generally at its peak, the wartime increase in female farm workers was 72 percent. The decline in male workers during the peak-month period approximated that for the slack months. In July 1944 women constituted 22 percent of the total, in contrast to only 12 percent in July 1940.

Wartime changes in agricultural employment become more meaningful when considered in the light of increases in the average hours of work and in the total volume of farm production. Although the number of farm workers declined during the war, the average hours of work rose to an extent that appears to have raised the total number of man-hours somewhat above the prewar level. The reporting of average hours worked in agriculture, in which the majority of workers are unpaid family workers, may not be so exact as in an industry where, for the most part, workers receive an hourly rate. Reports by the Bureau of the Census indicate, however, an upswing in hours in both the slack and peak months to December 1943, with the beginning of a downturn in January 1944.²

	Average hours	
	January	July
1941-----	(1)	52.9
1942-----	45.1	61.8
1943-----	52.7	63.1
1944-----	47.4	58.5

¹ Not available.

Despite the reduction in the total number of farm workers and the increased employment of inexperienced labor since the war, additional hours of work and especially such other factors as improved farming methods and better utilization of labor and equipment have made possible the expansion of farm production to an all-time high.

Regional Changes in Farm Employment

Every major region of the Nation except the Pacific States experienced a decline in agricultural employment during the war (table 3). The greatest percentage decreases were in regions normally accounting for more than half of total farm employment, namely, the South Atlantic, the East South Central, and the West South Central States. Although there was a significant depletion of the ranks of family workers, who comprise about three-fourths of farm employment, the number of hired farm workers underwent a greater proportional decrease.³

² The Labor Force Bulletin No. 5 (U. S. Department of Commerce, Bureau of the Census, Washington), November 1944. The average is a mean, computed from a distribution of single hours of work.

³ Based on estimates by the Bureau of Agricultural Economics. These estimates differ as to coverage, sampling methods, and purposes served from the Bureau of the Census estimates of agricultural employment given above. Following are two major differences: (1) A person 14 years of age or over reported as at work mainly in agriculture during a reporting week is classified by the Bureau of the Census as a farm worker, whereas any person reported as working on a farm 2 days or more in a reporting week is classified by the Bureau of Agricultural Economics as a farm worker; (2) the Bureau of the Census seeks to obtain unduplicated estimates of the total labor force, including agricultural workers, whereas the Bureau of Agricultural Economics attempts to measure the size of the farm working force, including those who work on farms only part of the time.

TABLE 3.—*Changes in Employment of Farm Workers, by Region, from January 1935-39 to January 1945 and July 1935-39 to July 1944*¹

Type of labor and geographic division	Employment (in thousands)		Percent of change	
	Jan. 1, 1945	July 1, 1944	Jan. 1, 1935-39, to Jan. 1, 1945	July 1, 1935-39, to July 1, 1944
Total farm workers: United States	8,005	11,355	-9.4	-8.8
New England.....	200	268	-0.1	-5.0
Middle Atlantic.....	491	710	-5.9	-1.8
East North Central.....	1,201	1,515	-8.7	-8.7
West North Central.....	1,368	1,787	-3.3	-6.4
South Atlantic.....	1,435	2,197	-12.7	-12.5
East South Central.....	1,228	1,754	-13.9	-14.3
West South Central.....	1,282	1,985	-14.4	-10.5
Mountain.....	345	465	-3.6	-8.6
Pacific.....	455	674	+2.5	+12.7
Farm family workers: United States	6,571	8,623	-8.2	-7.5
New England.....	150	163	+7	-0.9
Middle Atlantic.....	367	454	-4.9	-9
East North Central.....	1,041	1,202	-4.1	-3.7
West North Central.....	1,204	1,459	-1.6	-1.3
South Atlantic.....	1,133	1,735	-12.0	-9.0
East South Central.....	1,000	1,520	-13.7	-13.4
West South Central.....	1,065	1,485	-13.5	-10.4
Mountain.....	261	290	-3.7	-7.9
Pacific.....	281	315	-2.1	-3.7
Hired farm workers: United States	1,434	2,732	-14.4	-12.9
New England.....	50	105	-21.9	-1.9
Middle Atlantic.....	124	256	-8.8	-3.4
East North Central.....	160	313	-30.4	-24.0
West North Central.....	164	328	-14.1	-23.9
South Atlantic.....	302	462	-14.9	-23.5
East South Central.....	159	234	-15.4	-19.9
West South Central.....	217	500	-18.7	-10.9
Mountain.....	84	175	-3.4	-9.8
Pacific.....	174	359	+10.8	+32.5

¹ Farm Labor (U. S. Department of Agriculture, Bureau of Agricultural Economics, Washington), July 14, 1944, and January 15, 1945.

Because of the high seasonality of agricultural employment, January, generally the month of lowest employment, and July, generally that of highest employment, have been chosen for comparative purposes. The wide variations in climate, terrain, and types of products cause slight regional differences in the months of low and peak employment. When measured by a comparison of average employment in July 1935-39 with employment in July 1944, the changes range from a 13-percent increase in the Pacific States to a 14-percent decrease in the East South Central States. The United States average for all regions shows a decrease of 9 percent. The increase in the Pacific States was largely explained by a gain of almost a third in the number of hired farm workers. This group, at peak employment, accounts for more than half of all farm workers in that region, in contrast to only about a fourth in the Nation as a whole.

The extent of wartime change, when measured in terms of employment in January, a slack month, was approximately the same for the country as a whole as when measured by employment in July. The largest regional differences were in the Pacific States, where the January comparison shows a rise of 3 percent and the July comparison one of 13 percent.

The number of farm-family workers declined, on the basis of the January comparison, in every region of the country with the exception of New England, which showed an increase of less than 1 percent. On the basis of the peak-month comparison, every geographic divi-

sion experienced a decline in the number of farm-family workers, the reductions ranging from 1 percent in the Middle Atlantic States to 13 percent in the East South Central States.

During the war the number of hired farm workers showed wider regional fluctuations than did the number of farm-family workers, on the basis of both the slack-month and the peak-month comparisons. Regional changes from January 1935-39 to January 1945 in the number of hired farm workers ranged from a 30-percent decrease in the East North Central States to an increase of 11 percent in the Pacific States (the only area showing a gain). The number of hired workers in the country as a whole declined 14 percent. The total decline in terms of July employment was slightly less than that for the slack month, but the regional changes had a wider range, extending from a 24-percent decline in the East North Central region to a 33-percent increase in the Pacific States.

Before the war the largest numbers of hired workers were found in the South Atlantic, the East and West South Central, and the East and West North Central States, the major farm employment areas (table 4). The number of hired workers, however, as a proportion of total employment, was greatest in the Pacific, Mountain, New England, and Middle Atlantic States. Hired farm labor constituted 45 percent of total farm employment in July 1935-1939 in the Pacific States, the only area with a wartime increase in hired workers, as compared with 25 percent in the East North Central region, the area of the greatest wartime decline. By July 1944, the proportions of hired workers in these regions had risen to 53 percent in the Pacific States and fallen to 21 percent in the East North Central States. Large-scale farming and the production of special crops explain the unusually high proportion of hired workers in the Pacific States. The share of the East North Central region in total hired farm labor dropped from 13 percent before the war to 12 percent in July 1944. In contrast, the Pacific region increased its share from 9 percent to 13 percent. Another significant wartime shift in the percentage distribution of hired workers was the reduction from 19 to 17 percent in the South Atlantic States.

TABLE 4.—Regional Changes in Percentage Distribution of Hired Farm Workers and in Their Proportion of Total Farm Employment, July 1935-39 to July 1944¹

Geographic division	Percentage distribution		Percent of total farm employment	
	Average, July 1, 1935-39	July 1, 1944	Average, July 1, 1935-39	July 1, 1944
United States.....	100.0	100.0	25.2	24.1
New England.....	3.4	3.8	37.9	39.2
Middle Atlantic.....	8.4	9.4	36.7	36.1
East North Central.....	13.1	11.5	24.8	20.7
West North Central.....	13.7	12.0	22.6	18.4
South Atlantic.....	19.3	16.9	24.1	21.0
East South Central.....	9.3	8.6	14.3	13.3
West South Central.....	17.9	18.3	25.3	25.2
Mountain.....	6.2	6.4	38.1	37.6
Pacific.....	8.6	13.1	45.3	53.3

¹ Based on data from Farm Labor (U. S. Department of Agriculture, Bureau of Agricultural Economics, Washington), April 13, 1945.

Causes of Shifts in Farm Employment

A major factor contributing to wider fluctuations in the number of hired farm workers than of family workers was the increased demand for nonfarm labor. The wartime demand for labor made it possible for many hired workers to better their economic status by taking full-time nonfarm jobs at comparatively high wages. Farm-family workers as a group experienced less need to search for steady employment, but many of them also took nonfarm jobs.

Wartime changes tended to increase the degree of concentration of hired workers on large farms. Migration from farms resulted in many cases in the consolidation of farms, and small farms had to depend more largely on family labor. In 1939, one-tenth of 1 percent of all farms, or slightly less than 1 percent of the farms reporting hired labor, had nearly 13 percent of all hired workers. Available information indicates that the larger farms were better able to retain or replace their hired workers; the net decrease in the number of hired farm workers occurred mainly on family-size farms.⁴

The increased demand for workers has resulted in other changes in the farm employment structure. The desire to stabilize the labor force appears to have caused a reversal in the South, since 1940, of the earlier trend from sharecroppers to hired workers. Moreover, some members of farm families who were formerly paid for their work on the family farm became partners or tenants and thus were removed from the hired-worker category. In some cases family workers shifted to paid work on other farms. Increased farm incomes, making possible the payment of a regular wage, caused some family workers to shift to the hired-worker group on the family farms. This change in status sometimes proved to be necessary to induce family workers to remain. Changes of this nature, however, did not prevent a comparatively large decline in the number of hired farm workers.

Wartime changes in regional distribution and types of farm labor were caused in considerable part by changes in the volume and types of agricultural production. Indexes of production constructed by the Bureau of Agricultural Economics⁵ indicate a general rise of 36 percent, by 1944, over the 1935-39 average. The major increases were in oil-bearing crops (173 percent), feed grains and hay (57 percent), meat animals (55 percent), poultry and products (53 percent), and food grains (48 percent). The only decreases among the 12 major types of products were in sugar crops (18 percent) and cotton and cottonseed (7 percent). The increases in production were accompanied by considerably larger increases in average output, which made possible the expanded production with fewer workers. Exact regional comparisons of the above production figures with employment statistics cannot be made, because the production indexes represent types of output, whereas the employment figures are by geographic division. Some of the changes in output, however, have an obvious connection with changes in employment. The decline in the production of cotton, for example, accounts in part for the exceptionally large reductions in farm employment in the South Atlantic, East South Central, and West South Central States.

⁴ Wages of Agricultural Labor in the United States, by Louis J. Ducoff (U. S. Department of Agriculture, Bureau of Agricultural Economics, Washington, September 1944).

⁵ The Farm Income Situation (U. S. Department of Agriculture, Bureau of Agricultural Economics, Washington), December 7, 1944, and subsequent revisions.

A special study of productivity in agriculture⁶ makes possible some direct comparisons of production and employment on the basis of 11 geographic areas, classified by major crops. Production in all of these 11 areas was significantly higher in 1944 than in 1939, and employment was lower in all except California. The largest increase in production (69 percent) occurred in the Small Grain area, but it was this region that also experienced the largest increase in output per worker (72 percent), the decline in employment being 2 percent. The increase in production in California was 10 percent, much below the average increase; but output per worker increased only 3 percent, a much smaller increase than in any of the other 10 areas. The net effect on employment in California was a rise of 7 percent.

Changes in production and in average output were affected in some degree by the supply of labor and by types of available workers, as well as numerous other factors. More significantly, however, the causal relationship ran in the other direction, so that changes in the types, volume, and modes of farm production had a significant effect on the composition and geographic distribution of farm labor.

Farm Operators in 1940 and 1944

The Bureau of the Census, in a sample survey made in April 1944 in cooperation with the Bureau of Agricultural Economics,⁷ reported an estimated decline in the number of farm operators from 6,096,799 in April 1940 to 5,500,000 in April 1944. This is a decrease of about 10 percent, which approximates the change in total farm employment. There is no indication of a reduction in the total amount of land under cultivation, and the change therefore indicates an increase in the amount of land per operator. About two-thirds of the decrease in the number of farm operators occurred among those 55 years of age and over. Relatively high wartime farm prices made retirement possible for many of those who had been forced to postpone retirement during the depression and the years following. Moreover, it is probable that, in a number of instances of joint ownership, the younger member was listed as operator in 1944, whereas the older member was so listed in 1940.

The number of farm operators who worked away from their farms for pay or profit was 71 percent greater in 1943 than in 1939. A substantial proportion in every age group of farm operators reported off-farm work during 1943, but operators aged 25 to 34 represented the highest percentage; in this age group, 63 percent, or 590,000, reported off-farm work. Even among the operators 65 years of age and over, 27 percent, or 170,000, reported work off their farms.

Classification of the number of farm operators who worked away from their farms in 1943 discloses that about a third, representing nearly four times the number in 1939, were engaged in work on other

⁶ Productivity in Agriculture, 1942-1944 (U. S. Bureau of Labor Statistics, mimeographed report, May 1945). The Bureau of Labor Statistics indexes of agricultural production are extensions of indexes constructed by the National Research Project of the Work Projects Administration. The indexes differ from those of the Bureau of Agricultural Economics and from certain other published measures of agricultural production, because of differences in concepts and methods. Details of the procedures used are given in a mimeographed report, Productivity in Agriculture, 1909-1942, obtainable, on request, from the Bureau of Labor Statistics.

⁷ Farm Operators in the United States, April 1944 and April 1940 (U. S. Department of Commerce, Bureau of the Census, and U. S. Department of Agriculture, Bureau of Agricultural Economics, Washington, May 7, 1945). A farm operator is defined by the Bureau of the Census as a person who operates a farm, either performing the labor himself or directly supervising it.

farms either for pay or on an exchange basis. The average number of days worked on other farms rose from 61 days in 1939 to 68 in 1943. Approximately 5 percent of the total labor required for agricultural production during 1943 was put in by farm operators on other farms.

In addition to helping to establish a new peak in agricultural production, farm operators accounted for nearly a million man-years of nonagricultural work during 1943. The greatest contribution to this total was made by the 630,000 farm operators who had 250 or more days of nonfarm work in that year. The total number of farm operators reporting nonfarm work rose from less than 22 percent in 1939 to more than 30 percent in 1943. The average number of days put in at nonfarm work by all farm operators reporting such work was 172 days in 1943, as compared with 159 days in 1939.

Wartime Sources of Agricultural Labor

With the normal supply of labor greatly depleted by the war, farmers had to utilize new sources in order to meet wartime demands. Part of the short supply was remedied by an increase in working hours, especially among farm operators, and by the entry into the farm-labor force of women, youths, and older persons. The major source of wartime farm-labor recruits, however, was the local population, either residents or persons from nearby small towns. "Twilight" bands of townspeople, soldiers on special leave, vacationists, high-school students, and college girls temporarily increased the ranks of farm labor. Japanese-Americans and prisoners of war were utilized in some farm areas. In addition, numbers of agricultural workers were imported from foreign countries.

The depletion of the ranks of those aged 20-34 among hired workers was in part offset by an increase in the younger and older age groups (table 5). A survey made by the Bureau of the Census shows between 400,000 and 500,000 fewer men aged 18-37 working for wages on farms in early April 1944 than in the last week of March 1940, or a decrease of over 35 percent. The greatest decline was among those aged 25-34 years, who represented over a quarter of the total hired workers in March 1940. Workers 14 to 17 years old comprised 13 percent of total hired workers in agriculture in April 1944, as compared to 6 percent in March 1940. During the same period the proportion of hired farm workers aged 65 years and over rose from 4 percent to 6 percent.

TABLE 5.—Percentage Distribution of Hired Farm Workers, by Age, 1940 and 1944¹

Age group	Mar. 24 to 30, 1940	Apr. 2 to 8, 1944
14-17 years.....	6.1	13.3
18-19 years.....	7.8	7.7
20-24 years.....	20.9	14.7
25-34 years.....	26.7	18.2
35-44 years.....	15.4	17.6
45-54 years.....	11.4	13.1
55-64 years.....	8.1	9.3
65 years and over.....	3.6	5.9
Total 14 years of age and over.....	100.0	100.0

¹ Data from Bureau of the Census table reproduced from *Wages of Agricultural Labor in the United States*, by Louis J. Ducoff (U. S. Department of Agriculture, Bureau of Agricultural Economics, Washington, September 1944).

In the Far West, in particular, the importation of foreign labor helped to replace some of the former migratory workers. The United States Government negotiated agreements with the Governments of Mexico, Jamaica, the Bahamas, and Newfoundland whereby workers imported from these countries for wartime farm work into the United States were to be paid the "prevailing wage rates" in the crops and areas concerned. The number of foreign agricultural workers transported by the Office of Labor, of the War Food Administration, and employed on July 1, 1944, totaled 80,691,⁸ of whom about two-thirds were Mexicans. Mexican labor was distributed among 17 States and extended as far east as Michigan, but California employed 27,653, or well over half. The other Pacific States and the Mountain region employed most of the other workers from Mexico. Mexicans in the Pacific and Mountain States comprised almost 9 percent of the total hired farm workers in those areas, in which the proportion of hired workers was relatively high. Jamaican workers totaled about 17,000. They were scattered along the Atlantic Coast and in the East North Central States, with the largest concentrations in Florida and New York. Nearly 6,000 additional farm laborers came from the Bahamas to work on farms in the Atlantic coastal area. About a thousand workers on farms in Minnesota and Wisconsin were natives of Barbados.

Postwar Farm Employment Problem

What are the postwar implications of the marked decline during the war in farm employment and the accompanying shifts in the status and composition of farm workers? Will the downward tendency of farm employment as a proportion of total employment continue at an accelerated pace? Does the increasing concentration of hired workers on larger farms indicate a continuing shift away from the family-size farm? What steps can be taken to minimize the extent and improve the conditions of seasonal and migratory farm labor?

Answers to such questions as these will depend, according to the Department of Agriculture, primarily on the maintenance of full production and employment in the nonagricultural segments of the national economy. The advance in the standard of living of farm workers will also depend on effective measures designed to make agriculture more productive, especially on farms with limited resources and marketing opportunities. The reconversion of agriculture from war to peace will require many shifts in types of production and employment, as, for example, relative reductions in wheat, the oil crops, and dry edible beans and peas. The handling of reconversion problems, as well as the solution of the basic problem of maintaining high national levels of agricultural income and employment, will depend vitally on levels of industrial income and employment.⁹

Important as is the agricultural portion of the economy, it employed, even in the peak month of July 1944, less than a fifth (18 percent) of the civilian labor force, and in January 1945 only about

⁸ Farm Labor (U. S. Department of Agriculture, Bureau of Agricultural Economics, Washington), July 14, 1944.

⁹ Report of the Secretary of Agriculture, 1944 (Washington, 1944), pp. 1-8, 96-107, and related passages. See also Monthly Labor Review, May 1945 (p. 1000).

an eighth (13 percent) of the total. The major market for farm products must continue after the war to be found in the demands of nonfarm workers in the United States. Furthermore, farm prosperity will depend on such a distribution of nonfarm buying power as will maintain a high level of demand by the mass of nonagricultural workers, whose earnings in the past have seriously restricted their consumption of farm products.

The employment and earnings of hired workers on farms are especially dependent on favorable nonfarm conditions. When industrial production and employment decline, the farm owner or tenant has at least a place to live and an opportunity to work for a subsistence; a hired farm worker either loses his job or finds it necessary to accept a wage that is depressed on the one hand by the narrow margin of farm profits and on the other by the competition of unemployed city workers for his job. Even in relatively prosperous times hired farm workers have been confronted by seasonality of production and the necessity of migration from job to job to maintain even a limited amount of employment and earnings. Although the number of hired farm workers has ordinarily averaged during the year about 2,500,000 persons, the number in the peak month (usually July) has been approximately twice as large as the number in the slack month. It has been estimated that about 4,000,000 persons work for wages on farms during at least a part of the year. Some hired workers as well as family workers are in the labor market for only a part of the year. Normally, however, the hired farm workers depend on their wages. Large numbers find it necessary to shift from farm to farm and even from region to region, and many depend in part on nonfarm work.

Farmers and hired farm workers depend on favorable nonfarm conditions; nonagricultural workers, in turn, are vitally affected by farm conditions. When farmers are able to produce profitably and employ workers at fair wages there is comparatively little pressure of farm labor (either hired labor or family labor) on nonagricultural jobs and wages. There is also a large area of common interests in policies designed to extend social security to farm as well as nonfarm groups and to maintain an interchange of products based on efficient use of labor and resources.



Opportunities for Foreign Employment¹

THE increased number of inquiries made at local offices of the U. S. Employment Service relative to civilian employment opportunities in foreign countries has resulted in issuance by the War Manpower Commission of a foreign job guide. This guide, with monthly revisions, carries a list of Federal agencies and private companies recruiting workers for jobs in Alaska, Hawaii, Puerto Rico, Bermuda, South America, Europe, China, Africa, Arabia, and other places. Among the Federal agencies so listed are the Department of Agriculture, the War Department, the War Shipping Administration, the

¹ U. S. War Manpower Commission: Guide to Foreign Employment Opportunities (for use in U. S. Employment Service offices), May 1945; Field Instruction No. 787, Supplement No. 1, June 5, 1945; Press release (PM-4828), June 6, 1945.

State Department, the Navy Department, and 16 others. The private employers requesting workers through USES include several oil companies, an export corporation, a construction company, and the American Red Cross.

Employment opportunities are for professional, semiskilled, and unskilled workers. The list of jobs current on June 6 included supply inspectors, cooks, guards, machinists, watchmakers and watch repairmen, telegraphers, riveters, boilermakers, clerks, typists, and numbers of others. The processing of applications and the necessary security check, in those instances in which the work is of a highly confidential nature, require several weeks. Local USES offices have reported that many veterans are expressing interest in returning to permanent employment, overseas, that will utilize their highest skills. In addition, civilian workers who have lost their jobs as the result of cut-backs have also made inquiries about foreign job opportunities.



Aliens in the Labor Market, 1940¹

IN THE fall of 1940, about 4,890,000 aliens registered in continental United States. Of those 14 years of age and over, 72.8 percent of the men and 19.8 percent of the women reported an occupation. The averages for the entire population, according to the census of April 1940, were respectively 73.0 percent and 23.4 percent, indicating a somewhat lower-than-average proportion of aliens in the labor market.

This observation is open to question, however, for the greater average age of the alien population would tend to reduce the proportion reporting an occupation. Analysis of the alien material indicates that the percent reporting an occupation varied widely with age. For males a maximum of over 86 percent was reported between ages 30 and 40. Among the females the maximum was 44.9 percent in the age group 20 to 24. Above age 25 their participation in the labor market declined rapidly, presumably because of a withdrawal of married women from employment.

However, when the abnormal age distribution of the aliens is taken into consideration, the adjusted percentages of aliens who reported an occupation were higher than the national averages for both men and women, being 76.8 percent for the former and 28.3 percent for the latter. It seems, therefore, that on a comparable age-distribution basis alone, a more substantial percentage of aliens than of citizens reported an occupation.

The occupational distribution of aliens 14 years of age and over as compared with that of the total population of similar grouping is shown in table 1.

¹ Monthly Review (United States Department of Justice. Immigration and Naturalization Service), March 1945.

TABLE 1.—Occupational Distribution of Aliens and of Total Population Aged 14 Years and Over, in 1940

Occupational group	Aliens ¹ 14 years and over		Total population ² 14 years and over	
	Male	Female	Male	Female
	Percent	Percent	Percent	Percent
Professional, semiprofessional.....	2.4	1.6	3.9	3.0
Farmers, farm managers.....	4.6	.3	9.9	.3
Proprietors, managers, etc.....	6.3	.9	6.7	.9
Clerical, sales, etc.....	5.3	2.1	9.3	6.7
Craftsmen, foremen, etc.....	12.3	.4	10.9	.2
Operatives, etc.....	15.1	7.1	13.6	4.4
Domestic service.....	.5	4.3	.3	4.3
Protective services.....	.6	-----	1.4	-----
Other services.....	7.5	2.7	3.3	2.7
Farm laborers.....	6.5	.2	6.1	.7
Other laborers.....	11.7	.2	7.5	.2
Others, including persons not in labor force.....	27.2	80.2	27.0	76.6

¹ Based on new registration material, fall of 1940.² Based on April 1940 census.

The above statistics show that in 1940 aliens constituted less than the average percentage of professional and semiprofessional workers, farmers, farm managers, and clerical and sales personnel. Their representation among proprietors and managers, domestic servants, and farm laborers corresponded closely with the proportional averages for the whole population, and their concentration was greatest in the occupational groups of craftsmen and foremen, factory operatives, service workers, and laborers.

Occupational Status

The proportion of alien men and women in the professions and unskilled occupations as compared with the national averages is shown in table 2, "unskilled" consisting of laborers and domestic servants.

TABLE 2.—Distribution of Aliens and of Total Population, 14 Years of Age and Over, in Professions and Unskilled Occupations

Population group	Professions	Unskilled occupations			
		Total	Farm laborers	Other laborers	Domestic servants
	Percent	Percent	Percent	Percent	Percent
Aliens: ¹					
Male.....	2.4	18.7	6.5	11.7	0.5
Female.....	1.6	4.7	.2	.2	4.3
United States average: ²					
Male.....	3.9	13.9	6.1	7.5	.3
Female.....	3.0	5.2	.7	.2	4.3

¹ Percentages based on 1940 registration² Percentages based on 1940 census.

The proportion of alien males was below the United States average in the professions and above it in the unskilled occupations. "Alien females show a somewhat lower than average number in the unskilled occupations," according to the report under review, "partly because of the lower fraction of all alien women in the labor force."

The occupational distribution of aliens in the professions and in unskilled labor in 1940 may be compared roughly with that reported at different periods of immigration (table 3). More than half of those resident in 1940 entered the country prior to World War I, over a fourth during the 1920's, and an eighth during the 1930's.

TABLE 3.—*Distribution in Professions and Unskilled Occupations, of Immigrants in Specified Periods, and of Resident Aliens in 1940*

Class and period	Aliens as percent of population 14 years of age and over in —				
	Professions	Unskilled occupations			
		Total	Farm laborers	Other laborers	Domestic servants
Immigrant aliens:					
1905-14.....	1.2	54.0	22.4	20.5	11.1
1920-29.....	3.1	30.6	5.0	15.4	10.2
1930-39.....	6.1	16.0	7.5	-----	8.5
Resident aliens, 1940 ¹	1.9	11.0	3.1	5.4	2.5

¹ The report under review points out that the resident aliens cannot be directly identified in earlier immigration reports.



Employment and Unemployment in Cuba, 1943¹

THE recently published General Report of the 1943 Cuban Census shows that in June 1943, of a total population of 4,778,583, more than 1,520,000 were reported to be normally engaged in gainful occupations. Of that number, over 856,000 were listed as gainfully or actually employed; information was lacking on about 343,700; and more than 320,000 were unemployed. The unemployment figures were reported to have been swollen by the fact that the census was taken during the "dead" sugar season, when agricultural and industrial sugar workers are temporarily out of work.

Industrial Distribution of "Normally" Employed Population of Cuba, June 1943

Industry	Total "normally" employed	Actually employed	Unemployed	No information
All industries.....	1,520,851	856,441	320,664	343,746
Agriculture, livestock, and fishing.....	630,356	313,721	157,490	159,145
Mining.....	5,507	3,894	572	1,041
Construction.....	25,878	14,883	5,371	5,624
Manufacturing and mechanical industries.....	187,645	110,214	40,908	36,523
Transportation and communication.....	33,922	23,480	4,827	5,615
Commerce.....	146,572	99,542	22,245	24,785
Banking and finance.....	2,312	1,755	184	373
Domestic services.....	73,963	47,108	10,972	15,883
Entertainment.....	5,315	3,179	952	1,184
Professionals.....	31,739	18,384	6,383	6,972
Government.....	60,763	43,444	5,686	11,633
Various service industries.....	2,582	1,750	377	455
Unclassified.....	314,297	175,087	64,697	74,513

¹ Data are from report from Eugene Desvernine, special assistant, United States Embassy, Habana, July 10, 1945 (No. 283).

Almost 20 percent (approximately 343,700 out of more than 1,520,000) failed to report their status at the time of the census. The foregoing table, giving the industrial distribution of the employed and unemployed in June 1943 indicates that when the approximately 856,000 persons actually employed are considered, the largest group (almost 314,000 or 36.6 percent of the total employed) were in agriculture, livestock, and fishing.

Employment Conditions in Italy, 1944-45¹

Summary

IN AN effort to mitigate the effects of serious unemployment in northern Italy, the Committee of National Liberation for Northern Italy and later the Allied Military and Italian Government agreed to retain, until the end of July 1945, the policy of guaranteed paid employment for industrial workers which was begun under the Fascist regime. In spite of a plan to freeze wages at levels prevailing on April 3, 1945, wages in northern Italy rose in the spring and early summer of 1945 because of the payment of "liberation" and other bonuses and specific wage increases. Cost of living in the north was also rising, and the North Italian Chambers of Labor, agreeing on the futility of raising wages, recommended coordinated action to lower prices. Although the Fascist legislation on the socialization of industry was abrogated by the Committee of Liberation of Northern Italy, workers' committees in the factories retained some of the powers given them by that legislation, and policy regarding it had not been fully clarified in June.

In the central and southern parts of Italy, also, reemployment in industry was retarded. A sample study of industrial establishments in that area, as of September 1944, showed that those employing more than 10 persons had increased in number about 14 percent since the census of 1937-39 but that the number of persons employed had fallen more than half. Nearly three-fifths of the workers in the establishments were totally or partially unemployed because of requisition of plant by the Government, heavy war damage to plant, removal of machinery, or total destruction by war.

Conditions in Northern Italy, May-June 1945

EMPLOYMENT AND UNEMPLOYMENT

Although industrial establishments in northern Italy were preserved in unexpectedly good condition during the war, opportunities for employment immediately after the surrender of the Germans on May 2 were greatly reduced by the shortage of coal and raw materials, the change to postwar production, and the return of workers from hiding places in Italy or from forced labor in Germany. In June 1945 unemployment was reported as "widespread." In Genoa, where normally

¹ Data are from United States Embassy at Rome, reports of Alexander Kirk, Ambassador, June 18, 1945 (No. 1761), John Clarke Adams, labor attaché, May 14 (No. 64), and June 22 (No. 102), and William D. Grampp, vice consul, June 8, 1945 (No. 88); Censuses and Surveys for the National Reconstruction (Italy) carried out in September 1944, Preliminary Data, 1st Edition, Rome, February 1945; U. S. Department of State Bulletin, October 8 and November 5, 1944; Foreign Commerce Weekly (U. S. Department of Commerce), June 16, 1945; Foreign Agriculture (U. S. Department of Agriculture, Office of Foreign Agriculture Relations) May 1945; and various news digests.

the main sources of employment were at the port, in transportation, and in armament manufacture, the port was wrecked, transportation was curtailed because of lack of ships and goods, and there was little work at the armament plants. The unemployed were estimated at 75,000 early in June, without counting idle workers retained on pay rolls by the freezing of employment.

In Milan on the same date, the estimated unemployed numbered 150,000 out of a population of 1,000,000. In Turin, where war damages were slight, employment was relatively higher, although it was reported that some 87,000 workers were "surplus" but still drawing wages. When the shortage of coal continued in July 1945, some estimates placed the proportion of industrial workers in full employment as low as 20 percent.

GUARANTEED WAGE

In order to lessen the effects of unemployment, the Allied Military Government in northern Italy agreed to a policy in June, guaranteeing continuance of paid employment in industry through July 1945 by (1) forbidding dismissals and providing that wages paid to idle workers would be borne in part by the Italian Government, and (2) authorizing benefit payments for various workers placed on waiting lists with the permission of factory commissions or the government labor office. This plan retained, for the time being, a policy forbidding the dismissal of industrial workers, which was begun by the so-called Fascist Republican Government in January and February 1945, and continued in the following spring during and after the collapse of German control, by the Committee of National Liberation of Northern Italy.

The original legislation required that workers on the pay rolls of industrial establishments be paid normal minimum hourly earnings for a 48-hour week and that the difference between the wages for the hours actually worked and the wages for the hours paid should be partially made up from a special Government fund (*Cassa Integrazione*) to which employers contributed. The Allied Military and Italian Governments' plan forbade the dismissal of workers to whom the plan applied, except for disciplinary reasons or unless alternative employment could be obtained immediately. The plan, however, did not apply to workers normally engaged in agriculture, as approved by the local labor office, nor did it forbid the gradual dismissal (with AMG approval) of workers taken into employment after September 8, 1943. The latter regulation permitted the release of workers who had been hired during the German occupation for noneconomic reasons, in order to hinder their deportation to Germany as slave laborers.

Guaranteed wage rates.—The recent plan required that all persons in industrial employment who worked more than 8 and less than 40 hours a week should be paid their proper rate for the hours actually worked, and 75 percent of the minimum base pay per hour for the remaining hours up to 40. The industrial establishments were to be entitled to recover from the *Cassa Integrazione* two-thirds of the payments made for time not worked. Any establishment financially unable to advance either the payments recoverable from the *Cassa Integrazione* or the family-allowance payments mentioned below, was given the right to apply for assistance to the National Institute of Social Welfare (*Istituto Nazionale della Previdenza Sociale*).

Benefits for workers on waiting lists.—Another method of guaranteeing pay for industrial workers was provided in the recent plan (as in the Fascist legislation) by authorizing the establishment of temporary waiting lists of workers in companies which were compelled to reduce the number of workers in active employment. Such lists were to include the names of workers who, at the time of the order, were on the Fascist "temporary disposability list" and the names of those who might be placed there later with the consent of the internal factory commissions or the local labor office.

Workers on the waiting lists were to receive the following benefits: A daily allowance ranging from 10 lire² for males over 18 to 4 lire for juveniles under 18; the normal family allowance; and a daily allowance ranging from 20 lire to 8 lire, to be paid by the Special Unemployment Fund. These waiting lists were to be sent periodically to the National Institute of Social Welfare and the local labor office, and the latter agency was to attempt to find employment for the workers on the lists.

Employment policy of labor chambers.—The plan guaranteeing wages expired on the last day of July 1945. The need to combat unemployment was stressed at a meeting of the North Italian Chambers of Labor in Milan late in June. The meeting proposed that management keep all "present" workers on the pay rolls and operate in shifts in order to give all workers something to do.

WAGE RATES

At the time of the German collapse in northern Italy, wage rates in that area were lower than in the central and southern parts of the peninsula. The Allied Military Government planned to hold rates at the level prevailing on April 3, 1945, by means of an order which permitted "negotiation of variations." This plan could not be fully carried out, because of previous commitments made (in some cases before liberation) by northern committees of liberation, chambers of labor, and employers' representatives regarding the payment of "liberation" bonuses to industrial workers.

Although the liberation bonus appears to have been first offered as a reward to the workers for protecting the factories from the Germans' sabotage, the idea spread to commercial and governmental workers and to regions of the south which were already liberated. Eventually the Italian Government recommended that the payment of liberation bonuses should not be opposed in the north. In Milan the bonus for all industries amounted to 5,000 lire for men and women who were heads of families, 3,500 lire for men and women not heads of families, and 2,000 lire for workers under 18 years of age. Other types of bonuses paid in the north included double pay for the last 2 days of April and 2 days in May at Genoa, and various forms of "insurrection" indemnities for workers who spent the period of the insurrection serving with the Freedom Volunteers.

Requests for wage increases were made in the north as prices began to rise after the surrender of the Germans. The first officially authorized change occurred in Bologna, where the request had been referred to the regional joint advisory committee—a committee composed of representatives of the Italian Government, Italian employers, and workers, which was appointed to serve in a consultative capacity

² The Allied Military Government established, in July 1943, for the liberated portion of Italy, an exchange rate of 1 lira for 1 cent.

on questions of labor, industrial relations, and wages. Because Bologna had been a front-line town for 6 months, and cost of living had increased 65 percent since the last wage increase in November 1944, the committee recommended an increase of wages for skilled, semiskilled, and unskilled workers to 180, 165, and 150 lire per day, respectively.

The accompanying table shows minimum daily wage rates, including family allowances and war and food bonuses, which have been agreed upon for an adult male worker with a wife and two children in specified industries in various regions of northern Italy.

TABLE 1.—Minimum Daily Wage Rates Established by Agreement in Northern Italy, Early Summer, 1945¹

District and industry	Skilled workers					Unskilled workers				
	Basic wage	Allowances			Gross wage	Basic wage	Allowances			Gross wage
		Fam- ily	War	Food			Fam- ily	War	Food	
Bologna:	<i>Lire</i>	<i>Lire</i>	<i>Lire</i>	<i>Lire</i>	<i>Lire</i>	<i>Lire</i>	<i>Lire</i>	<i>Lire</i>	<i>Lire</i>	<i>Lire</i>
Building	73.60	16.50	20.00	8.83	118.93	57.60	16.50	20.00	6.91	101.01
Electrical manufacturing	80.56	16.50	20.00	—	117.06	62.16	16.50	20.00	—	98.66
Food	69.60	16.50	20.00	10.00	116.10	59.20	16.50	20.00	10.00	105.70
Printing	77.20	16.50	20.00	10.00	123.70	—	—	—	—	—
Cuneo:										
Boot and shoe, hat, cotton goods, and building	64.80	16.40	20.00	8.00	² 100.20	—	—	—	—	—
Cement, chemicals	62.40	16.40	20.00	8.00	106.80	55.20	16.40	20.00	8.00	99.60
Engineering	72.40	16.40	20.00	8.00	116.80	55.20	16.40	20.00	8.00	99.60
Food	66.40	16.40	20.00	8.00	110.80	55.20	16.40	20.00	8.00	99.60
Furniture and wood	27.68	16.40	20.00	8.00	³ 90.08	20.80	16.40	20.00	8.00	³ 83.20
Jute and rubber, flax, hemp, and tanning	63.20	16.40	20.00	8.00	107.60	55.20	16.40	20.00	8.00	99.60
Mining:										
Surface	65.60	16.40	20.00	8.00	110.00	55.20	16.40	20.00	8.00	99.60
Underground	67.20	16.40	20.00	8.00	111.60	56.80	16.40	20.00	8.00	101.20
Paper	66.80	16.40	20.00	8.00	111.20	55.20	16.40	20.00	8.00	99.60
Textile (artificial fibers)	65.60	16.40	20.00	8.00	110.00	55.20	16.40	20.00	8.00	99.60
Wool	69.20	16.40	20.00	8.00	113.60	55.20	16.40	20.00	8.00	99.60
Milan:										
Building	⁴ 114.00	—	—	10.00	124.00	⁴ 105.00	—	—	10.00	115.00
Engineering	⁴ 114.00	—	—	10.00	124.00	⁴ 105.00	—	—	10.00	115.00
Novara:										
Cotton	68.00	16.40	20.00	6.00	110.40	57.60	16.40	20.00	6.00	100.00
Engineering and millinery	76.00	16.40	20.00	6.00	118.40	57.60	16.40	20.00	6.00	100.00
Hosiery and knit goods	77.60	16.40	20.00	6.00	120.00	57.60	16.40	20.00	6.00	100.00
Iron foundry	76.00	16.40	20.00	6.00	118.40	57.60	16.40	20.00	6.00	100.00
Textiles (artificial fibers)	68.80	16.40	20.00	6.00	111.20	57.60	16.40	20.00	6.00	100.00
Turin:										
Boot and shoe, hat, cotton goods, and building	68.00	16.40	20.00	8.00	112.40	57.60	16.40	20.00	8.00	102.00
Cement, chemicals	65.60	16.40	20.00	8.00	110.00	57.60	16.40	20.00	8.00	102.00
Engineering	76.00	16.40	20.00	8.00	120.40	57.60	16.40	20.00	8.00	102.00
Food	69.60	16.40	20.00	8.00	114.00	57.60	16.40	20.00	8.00	102.00
Furniture	36.80	16.40	20.00	8.00	³ 99.20	29.60	16.40	20.00	8.00	³ 92.00
Mining:										
Surface	68.00	16.40	20.00	8.00	112.40	57.60	16.40	20.00	8.00	102.00
Underground	69.60	16.40	20.00	8.00	114.00	59.20	16.40	20.00	8.00	103.60
Paper	70.00	16.40	20.00	8.00	114.40	57.60	16.40	20.00	8.00	102.00
Textile (artificial fibers)	68.80	16.40	20.00	8.00	113.20	57.60	16.40	20.00	8.00	102.00
Wool	72.80	16.40	20.00	8.00	117.20	57.20	16.40	20.00	8.00	101.60
Venezia:										
Aluminum	76.00	11.05	20.00	—	107.05	57.60	11.05	20.00	—	88.65
Building	68.00	12.00	20.00	—	100.00	57.60	12.00	20.00	—	89.60
Glass	80.00	12.00	20.00	—	112.00	60.00	12.00	20.00	—	92.00
Shipbuilding	68.00	12.00	20.00	—	100.00	60.00	12.00	20.00	—	92.00
Vercelli:										
Knit goods	77.60	16.40	20.00	—	114.00	57.60	16.40	20.00	—	94.00
Millinery	76.00	16.40	20.00	—	112.40	57.60	16.40	20.00	—	94.00
Paper	70.00	16.40	20.00	—	106.40	57.60	16.40	20.00	—	94.00
Textile (artificial fibers)	68.00	16.40	20.00	—	104.40	57.60	16.40	20.00	—	94.00
Wool	72.80	16.40	20.00	—	109.20	57.60	16.40	20.00	—	—

¹ Rates are for an adult male with a wife and 2 children.

² As shown in source.

³ Includes a "presence indemnity" of 18 lire.

⁴ Appears to include basic wage and family allowances.

COST OF LIVING

Before the liberation of northern Italy and the surrender of the Germans on May 2, 1945, living costs were lower in the north than in the south of Italy. In the north in April 1945, the monthly cost of a food budget providing 2,200 calories each for a family of 3.73 consuming units, ranged from 3,060 lire in Reggio Emilia to 13,820 lire in Bologna (where the inflationary effects of military expenditures resulting from recent liberation were being felt). In Rome in the same month, the same budget cost 12,538 lire.

After May 2, however, prices rose steadily in the north, not only because of Allied military expenditure but also because of profiteering and speculative withholding of goods in the hope of obtaining higher prices in the south. In May, the cost of the food budget as described above dropped to 11,162 lire in Rome because of an increase in supplies, whereas in the north prices rose to the levels indicated in table 2.

TABLE 2.—*Monthly Cost of Theoretical Fixed Food Budget¹ in Rome and Four Cities of Northern Italy, May 1945*

Item	Rome	Genoa	Milan	Turin	Vercelli
	<i>Lire</i>	<i>Lire</i>	<i>Lire</i>	<i>Lire</i>	<i>Lire</i>
Total cost.....	11,162	12,390	12,080	10,961	10,114
Rationed foods.....		(?)	(?)	334	197
Black-market foods.....		12,390	12,080	10,627	9,918
Percent of assumed expenditure on—					
Rationed foods.....	16	(?)	(?)	3	2
Black-market foods.....	84			97	98

¹ Budget providing 2,200 calories per consuming unit for a family of 3.73 consuming units.

² Only black-market prices available.

Because the quantity and prices of rationed foods in Genoa and Milan were not known, the total cost figures given for those cities in table 2 assume that all purchases were made in the black market. In Turin and Vercelli, however, such a small proportion of the total cost went for rationed foods that the figures for all four areas were believed to be roughly comparable.

The food situation was complicated not only by shortages of supply but also by the drop in the purchasing power of the lira. At exchange rates prevailing in Genoa early in July 1945, the value of the lira was recognized to be about one-seventh or one-eighth of what it was in 1940. In actual purchasing power, however, the lira had declined more in value than this comparison indicates. With macaroni at 130 lire per kilogram as compared to 3.60 lire in 1940, the lira of July 1945 had less than 3 percent of its purchasing power in 1940, and approximately the same was true for beef, mutton, and eggs. For olive oil, lard, wine, and sugar, the lira had in 1945 less than 2 percent of its purchasing power in 1940. Bread was the only foodstuff on which legal fixed prices were actually in effect (at about double the price of 1940), but the supply was insufficient.

A vigorous campaign for effective price control has been carried on in the south of Italy by the Italian General Confederation of Labor (CGIL) and in Milan, late in June 1945, a meeting of the North Italian Chambers of Labor recommended coordinated action by all the labor chambers to obtain lower prices. The delegates appear to have agreed that raising wages was futile; the real problem was to control the cost of living.

WORKERS' CONTROL OF FACTORIES

The socialization of industry which the Fascist Government prepared to carry out under authority of a decree of February 12, 1944, was formally annulled in April 1945 by the Committee of National Liberation of Northern Italy, and, in June, labor opinion was reported to be not fully crystallized regarding the policy of socialization.

The Fascist decree provided for the socialization of all industrial companies employing 100 or more persons or having a capitalization of 1,000,000 lire or more, by requiring a 50-percent labor representation on boards of directors and management councils, and the distribution of a percentage of profits to workers. Nationalization of enterprises of public interest could also be carried out under the decree by turning the enterprises over to a Government agency and leaving the nonvoting stock in the hands of the former owners.

Immediately after liberation, the Committee of National Liberation of Northern Italy apparently decided to preserve the material gains granted the workers by the Fascist legislation, without wholly accepting the system. Thus, the Committee's decree of April 17, 1945, purported to abolish the Fascist legislation on socialization, but proceeded to apply to firms liable to socialization various provisions for management councils to contain 50-percent representation of workers. Among the provisions were the requirements that elections of workers' representatives be conducted democratically and that excess profits be placed in a national fund rather than distributed to workers.

The policy formulated in this decree enabled committees of national liberation which had been organized in factories during the period of resistance to the Fascists to step into positions of power after liberation. In some cases these committees removed directors of firms and appointed commissioners to carry out routine work in the plants. After the arrival of officials of the Allied Military Government, such appointments could be made only with their approval. The policy to be followed regarding the action of such committees had not been fully clarified in June 1945, and the attitudes of different labor groups toward the committees differed.

Internal factory commissions, which may perform the functions of shop unions, also grew out of shop committees that were formed during the period of resistance. Directions for the election of the internal commissions were issued by the Milan Chamber of Labor early in May, and emphasis was laid upon democratic procedures.

Effects of War on Employment in Central and Southern Italy

EXTENT AND GENERAL RESULTS OF SURVEY

A survey of industrial damage and inactivity was carried out in the autumn and early winter of 1944 (and recorded as of September 15, 1944) in 38 Provinces of central and southern Italy. These Provinces in 1936 contained 43.4 percent of the total Italian population of 42,993,602 and 38.4 percent of the total working population of 18,345,432; during the period 1937-39 they accounted for 19.7 percent of the 2,847,000 persons employed in Italian industrial plants having more than 10 workers each. Of the 18,961,828 persons recorded in the

survey of central and southern Italy as of September 15, 1944, 114,126 were employed by the Allied forces, 128,552 were listed as totally unemployed, and 364,706 were refugees from other regions. Absences among the normally resident male population were so numerous at the time of the survey that comparisons in population figures with earlier data were deemed inadvisable.

The 1944 survey covered 8,926 establishments, 7,805 of which were in existence in the period 1937-39 and had been surveyed in the census of that period. In spite of the larger number of establishments in 1944, their labor force numbered only 220,006, whereas the 7,805 plants covered in 1937-39 had employed 461,629 persons (table 3). Only 42.3 percent of those persons reported as employed in September 1944 were working full time; 47.9 percent were only partially employed, mainly because of heavy war damage to the plants of their employers; and 9.8 percent were inactive.

TABLE 3.—*Number and Personnel of Active, Partially Active, and Inactive Plants in Central and Southern Italy, September 15, 1944*

Condition of plants	Number of establishments	Persons employed	Condition of plants	Number of establishments	Persons employed
Total.....	8,926	220,006	Inactive establishments.....	3,908	21,495
Active establishments.....	2,403	93,039	Totally destroyed.....	131	663
Partially active establishments.....	2,615	105,472	Machines removed.....	59	739
Machines removed.....	33	3,110	Heavy war damage.....	219	2,784
Heavy war damage.....	279	19,490	Requisitioned by—		
Requisitioned by—			Allied Authority.....	125	502
Allied Authority.....	54	2,463	Italian Authority.....	13	25
Italian Authority.....	6	147	Other causes ¹	3,361	16,692
Other causes ¹	2,243	80,262			

¹ Lack of electricity or of raw materials or of both.

The table indicates that over a tenth of the 220,006 industrial workers were attached to plants that had sustained severe losses from the war. The proportion would rise to over half if the plants rendered inactive or only partially active because of lack of electricity and/or raw materials (both arising from war conditions) were included.

DAMAGE AND INACTIVITY IN VARIOUS REGIONS

The comparison of data on war damage and employment given in table 4 indicates that the greatest decline in employment occurred in Campania, Abruzzi, Umbria, and Latium, where war damages to buildings, machinery, and raw materials were heaviest. In most of these areas the Germans fought the Allied advance and used the scorched-earth policy as they withdrew.

In Campania (which includes Naples and the site of the Salerno landing) the amount of war destruction to industrial establishments surveyed was estimated at 59.9 percent of the 1939 valuation and employment was estimated as at about 47 percent of the prewar level. In Abruzzi, where the industrial losses amounted to 50.6 percent of 1939 valuation, only about a fourth as many workers were employed in September 1944 as at the time of the census of 1937-39. Explanation of the difference in the situation in the two regions may

be that Abruzzi is farther north and was thus nearer more recent fighting, and that the Allied Authorities had already become active in Campania, especially in Naples.

In Latium, damage to industry amounted to 33.4 percent of the 1939 valuation, and employment to only a little over one-third of that in 1937-39. Apulia, on the northeastern back of the Italian "boot," saw little ground action and suffered the least damage recorded in the survey (5.5 percent of valuation); employment in 1944 stood at about 75 percent of the prewar level.

TABLE 4.—*Industrial Employment, and War Damage to Establishments in Central and Southern Italy, by Region, as of September 15, 1944*

Province	Employment rolls					War damage-					
	1937-39 ¹	1944			Number of plants surveyed 1944	Number of plants surveyed 1944	Value (In thousands of lire), 1939	Percent of damage to—			
		Total	Active plants	Inactive plants				Plant	Buildings	Machines	Raw materials
Total.....	461,629	220,006	198,511	21,495	8,926	4,397	13,154,575	34.7	27.6	27.4	55.4
Umbria.....	35,681	15,870	12,168	3,702	443	200	1,524,732	35.2	28.6	37.4	36.1
Latium.....	141,846	48,702	42,131	6,571	1,612	784	4,662,487	33.4	33.6	30.8	46.3
Abruzzi.....	25,418	6,399	4,439	1,960	554	319	421,187	50.6	50.0	42.7	66.2
Campania.....	94,240	44,501	41,622	2,879	1,632	797	3,038,542	59.9	36.6	36.5	79.2
Apulia.....	57,775	43,439	42,158	1,281	1,891	1,007	1,238,340	5.5	4.4	6.9	4.3
Lucania.....	3,603	1,908	1,687	221	164	76	22,793	11.4	9.8	13.1	9.2
Calabria.....	15,934	10,561	9,562	999	588	272	201,836	26.2	33.3	21.0	33.3
Sicily.....	49,532	27,595	25,816	1,779	1,532	709	1,653,775	16.7	20.3	13.3	25.6
Sardinia.....	37,600	21,031	18,928	2,103	510	233	390,883	8.8	11.6	4.8	11.1

¹ Employment reported as of 1937-39 of the 8,926 plants surveyed on September 15, 1944.

DAMAGE AND INACTIVITY IN VARIOUS INDUSTRIES

Of 4,397 plants which furnished data on war damage and employment in the survey of 1944, 1,769 plants suffered damage aggregating 4,559,600,000 lire—a 34.7-percent loss on the 1939 value of the 4,397 plants. Of the plants surveyed, 40.2 percent showed war damages; 28.1 percent of these plants had suffered from bombing, 18.5 percent from removal of machinery by the Germans, and 1.4 percent from transference of the plant to the north. The vulnerability of large or valuable plants is apparent from the data in table 5. Thus, the 40 percent that had suffered war damage accounted for about 85 percent of the valuation of all the plants. This vulnerability was particularly noticeable in the metallurgical, mechanical, chemical, electrical, and motion-picture and phonograph industries.

At the time of the census of 1937-39, the 38 Provinces surveyed in 1944 accounted for the following percentages of the total employment in various industries in Italy: Mining, 42.6 percent; food, 38.3 percent; leather, 36.7 percent; electrical, 35.7 percent. In the remainder of the 16 classifications shown in table 5 the percentages were smaller. In September 1944, the number of workers employed in all 16 classifications in 8,926 plants was only 47.6 percent of that in 1937-39 in the 7,805 plants which were in existence and surveyed in the earlier period.

In the 3,908 plants which were reported as inactive in September 1944 (out of a total of 8,926 plants), employment rolls were given as only 21,495, as contrasted with 203,250 in 3,693 of these plants which were operating in 1937-39. In the mining industry, the number of

workers carried on the rolls of inactive plants in September 1944 had dropped to 17.5 percent of those employed in 1937-39; in the food industry, to 13.4 percent; in the electrical industry to 13.3 percent; and in the clothing industry to as low as 4.2 percent.

TABLE 5.—*Amount of War Damage and Inactivity in Industrial Plants in Central and Southern Italy, September 15, 1944*

Industry	Plants surveyed					Inactive plants surveyed in 1944 which were—			
	Total number, 1944	Total value (in thousands of lire 1939)	Damaged plants			Active in 1937-39		Inactive in 1944	
			Number	Value (in thousands of lire 1939)	Amount of damage (in thousands of lire)	Plants	Workers	Plants	Workers
All industries.....	4,397	113,154,575	1,769	11,220,119	4,559,600	3,693	203,250	3,908	21,495
Mining.....	183	281,975	78	121,066	29,475	365	16,946	380	2,972
Lumber and woodwork- ing.....	369	263,895	156	191,356	88,260	255	6,375	298	783
Food.....	1,404	1,703,956	413	1,079,350	497,541	760	21,867	772	2,927
Metallurgical.....	7	57,156	4	55,857	21,957	9	1,946	9	289
Mechanical.....	250	1,899,582	136	1,755,311	761,204	204	31,816	221	1,334
Nonmetallic mineral manufacturing.....	329	306,718	185	216,943	80,247	285	11,791	300	1,570
Building.....	698	413,911	389	335,589	168,109	1,121	71,364	1,173	3,047
Chemical.....	181	1,156,804	92	1,054,392	232,835	140	8,339	159	3,616
Paper.....	64	103,748	33	46,713	19,898	60	3,303	62	726
Printing.....	169	269,441	55	205,071	59,597	78	2,672	82	937
Leather.....	66	53,126	17	35,575	24,476	80	2,239	82	177
Textile.....	171	710,321	77	654,852	267,586	104	11,167	117	1,638
Clothing.....	87	41,151	32	27,386	9,662	84	2,261	88	95
Motion picture and phonograph.....	11	65,890	6	63,415	24,233	5	959	5	48
Miscellaneous.....	320	1,897,523	44	1,592,794	1,340,730	102	9,085	117	1,187
Electrical, (production and distribution).....	88	3,929,377	52	3,784,449	933,790	41	1,120	43	149

¹ Represents value on firm's accounting books (as prescribed by law) on Dec. 31, 1939, or near as possible to that date.

² Includes the 3,693 plants surveyed in 1937-39 which had become inactive by Sept 15, 1944, and plants built between that period and Sept. 15, 1944, which had also become inactive.

RECONSTRUCTION PROBLEMS

In the reconstruction of Italy, attention had to be given first to supplies essential to avoid starvation and to carry on warfare in the north. Of 2,300,000 long tons of civilian supplies shipped to Italy in the first year after the invasion of Sicily, 1,107,000 tons were food, and the remainder consisted of fertilizer, coal, seeds, clothing, and sanitary and medical supplies. During the same time, the Allies rehabilitated certain key industries in order to provide food, textiles, and essential minerals for civilian and military use. However, the long continuance of fighting in the north, the lack of transportation, and the customary economic dependence of the more southerly regions upon the north, as well as other factors, retarded the normal development of the 38 Provinces covered in the survey.

According to a report from Sicily, in the first quarter of 1945 economic rehabilitation continued to be "paralyzed" by the lack of fuel and transportation. Reports of increasing unrest in the southern regions of the country continued in July 1945. The rehabilitation of industry had been discussed from time to time by the Italian Govern-

ment, the Allied Authorities, and the Italian General Confederation of Labor. Demands presented to the Government in the spring by the General Confederation of Labor included a request that commissions of workers and technicians be created to draft a plan of national economic reconstruction. At the first meeting of the Council of Ministers installed after the liberation of the north, material reconstruction and a public-works program were under discussion, and general statements were issued for the press. A plan for allocating coal to basic industries was announced in August.

Distribution of New Zealand Labor Force, February 1944¹

THE New Zealand labor force in February 1944 totaled 634,000 persons, of whom 406,000 were men and 228,000 were women. Approximately 10 percent of the male employment consisted of category "A" men, fit for military service in any part of the world, but withheld for industry. Workers in primary industry formed the largest employment group, numbering 175,600; farming alone accounted for 153,000 persons. Wage earners in the secondary industries and power group totaled 116,700. Distribution of the working force is shown in the accompanying table.

Labor-Force Distribution, New Zealand, February 1944

Industry group	Number of workers			Industry group	Number of workers		
	Total	Male	Female		Total	Male	Female
All groups.....	634,000	406,000	228,000	Secondary industries and power—Continued.			
Primary industry.....	175,600	165,600	10,000	Gas and electricity.....	6,800	6,400	400
Farming.....	153,000	143,000	10,000	Textiles, clothing, etc....	23,600	3,000	20,600
Sheep.....	35,200	34,000	1,200	Footwear.....	4,100	1,900	2,200
Dairy.....	75,000	70,000	5,000	Timber, joinery, boxes...	5,600	5,500	100
Other.....	42,800	39,000	3,800	Furniture.....	2,600	2,500	100
Sawmilling and forestry...	10,500	10,500	—	Minerals (lime, bricks, etc.)	4,600	4,600	—
Coal mining.....	5,300	5,300	—	Printing and publishing...	8,800	6,000	2,800
Fishing.....	1,400	1,400	—	Cartons, drugs, tobacco, etc.	11,100	7,400	3,700
Quarrying, gold, scheelite, etc., mining.....	5,400	5,400	—				
Construction (all building, construction, repairs, etc.)	19,000	19,000	—	Commerce, finance, storage...	117,100	44,000	73,100
Transport and communications.....	67,000	57,500	9,500	Banks, insurance, etc....	12,100	6,000	6,100
Railways.....	24,000	22,000	2,000	Shops, warehouses, etc....	105,000	38,000	67,000
Seagoing ships.....	4,700	4,500	200				
Road, tram, harbor, etc., services.....	25,800	24,000	1,800	Administration, professions, miscellaneous:			
Post, telegraph, radio....	12,500	7,000	5,500	Public service (excluding railways, education, public works, etc.).....	16,000	7,000	9,000
Secondary industries and power.....	116,700	77,300	39,400	Local authorities.....	5,000	3,000	2,000
Freezing works.....	13,000	12,500	500	Education.....	15,700	4,200	11,500
Butter and cheese factories.....	3,500	3,500	—	Professions.....	7,200	6,200	1,000
Other food.....	12,000	6,000	6,000	Police.....	1,400	1,400	—
Metal industries (excluding railway workshops).....	21,000	18,000	3,000	Prisons, hospitals, etc....	13,100	3,600	9,500
				Religion and social welfare.....	4,600	2,600	2,000
				Hotel, entertainment, domestic service.....	75,600	14,600	61,000

¹ Data are from New Zealand, National Service Department Report, Wellington, 1944.

Discharged Service Personnel

Reemployment Rights of Servicewomen

SERVICEWOMEN honorably discharged from the military forces are entitled to reemployment in their previous positions if they are able to meet the requirements and desire such reemployment, according to a statement by officials of the Selective Service System.¹

The Service Extension Act of 1941 extended the mandatory reemployment rights of the Selective Training and Service Act of 1940, as amended, to all persons who have served in the land or naval forces since May 1, 1940, and it is anticipated that a percentage of discharged servicewomen will be returning to their old employment.

It is true that many of these women are married or will be in the near future, and will not return to their old jobs. Military training may qualify some women for new types of employment. However, those who desire their former or a similar job are assured of reemployment rights.

Officers at the National Headquarters of Selective Service reported that every one of its local boards is equipped to take up reemployment cases for servicewomen and also to aid them in solving new job problems. Furthermore, a reemployment committeeman attached to each local board is charged with the responsibility of conferring with all discharged servicemen and servicewomen relative to their vocational problems. While it is not obligatory for a servicewoman to register with a local board, she should feel at liberty to take up the matter of reemployment with the local Selective Service Board in her community.

Employment and Other Provisions of Soviet Demobilization Law

ON June 23, 1945, the Supreme Soviet of the U. S. S. R. enacted a law providing for the demobilization by the end of 1945 of 13 older age classes in active army service. (Russian sources do not give the actual ages; however, it may be assumed that servicemen 38 years of age and older when mobilized were affected, since Soviet male citizens over 50 were not subject to compulsory military training.) Under the law, each discharged soldier is entitled to an outfit of civilian clothes, transportation to his home, food on the way, and mustering-out pay. For privates the mustering-out pay will be 1 year's regular pay for each year of service, for specialized personnel and sergeants 6 months' regular salary for each year of service, and for officers 2 to 5 months' pay, depending on length of service. (The regular pay of privates in the Soviet Army is much smaller than the pay of privates in the United States Army; it is also very small in comparison with the regular salaries of commissioned Soviet Army officers.)

¹ Selective Service radio release S-71, Washington, June 30, 1945.

The law obligates local authorities to find employment for each veteran within a month after his arrival home. In each case the job must be at least as good as the one held by the veteran before he entered the army. Moreover, in finding him a job, local authorities must give full consideration to the special skills acquired by the veteran in the army. Returning farm workers must also be given small plots of land in addition to jobs on the collective farms.

The law also requires local authorities to provide veterans living in the areas devastated by war with funds for the purchase of construction lumber. The All-Union Bank for Financing Housing is directed to grant veterans home-building loans of 5 to 10 thousand rubles, repayable in 5 to 10 years.¹

¹ Data are from the Demobilization Law, published in *Izvestiya* (Moscow) June 24, 1945 (p. 1).

Cooperation

Operations of Consumers' Cooperatives in 1944

Summary

CONTINUED expansion in both membership and business was exhibited by the consumers' cooperative movement in 1944. The distributive and service business of the local associations reached an all-time high of 568 million dollars and the regional and district wholesale associations supplying them had an aggregate business of over 155 million dollars. Service federations reported a total business of over 7½ million dollars.

Net earnings reported in 1944 for the whole group of central service, distributive, and productive federations exceeded 8¼ million dollars, of which nearly 8 million dollars was declared in patronage refunds to the member associations. The individuals who are members of affiliated local cooperatives received the benefit of these refunds, along with those made by the local associations on their retail business. Although a certain proportion of the local associations either sustained a loss or for other reasons paid no patronage refunds, the reporting store associations which did declare such refunds paid an average rate of 4.1 percent, the petroleum associations paid 7.7 percent, and the local service associations 2.4 percent.¹

Large proportions of both retail and wholesale earnings are traceable not to the distributive operations but to the productive plants operated by the central federations. Cooperative production has been increasing very rapidly in the past few years. In 1944 the value of goods produced in the cooperative plants reporting amounted to nearly 65 million dollars—more than twice the value produced in the preceding year. It is these productive enterprises that have proved to be the real money savers for cooperators.

Table 1 summarizes the status of consumers' cooperatives as of the end of 1944.

¹ These percentages are computed on volume of business done, not on investment.

TABLE 1.—*Membership and Business of Consumers' Cooperatives in 1944, by Type of Association*

Type of association	Total number of associations (estimated)	Number of members (estimated)	Amount of business (estimated)
<i>Local associations</i>			
Retail distributive associations.....	4,285	1,524,500	\$557,000,000
Stores and buying clubs.....	2,810	690,000	280,000,000
Petroleum associations.....	1,425	810,000	270,000,000
Other distributive ¹	50	24,500	7,000,000
Service associations.....	577	318,500	11,055,000
Rooms and/or meals.....	175	18,000	2,600,000
Housing.....	50	2,100	² 1,575,000
Medical and/or hospital care:			
On contract.....	50	95,000	1,300,000
Own facilities.....	18	45,000	2,100,000
Burial: ³			
Own facilities.....	36	35,000	275,000
Caskets only.....	4	1,400	5,000
Other ⁴	235	122,000	3,200,000
Electricity associations ⁵	850	⁶ 1,149,700	60,960,000
Telephone associations ⁷	5,000	330,000	5,485,000
Credit unions ⁸	9,099	3,027,694	212,305,479
Insurance associations.....	2,000	⁹ 10,510,000	190,000,000
<i>Federations ¹⁰</i>			
Wholesales:		<i>Association members</i>	
Interregional.....	2	26	¹¹ 11,775,000
Regional.....	25	3,790	¹¹ 140,498,000
District.....	10	152	¹¹ 3,178,000
Service federations.....	21	1,500	7,820,000
Productive federations.....	12	140	14,895,000

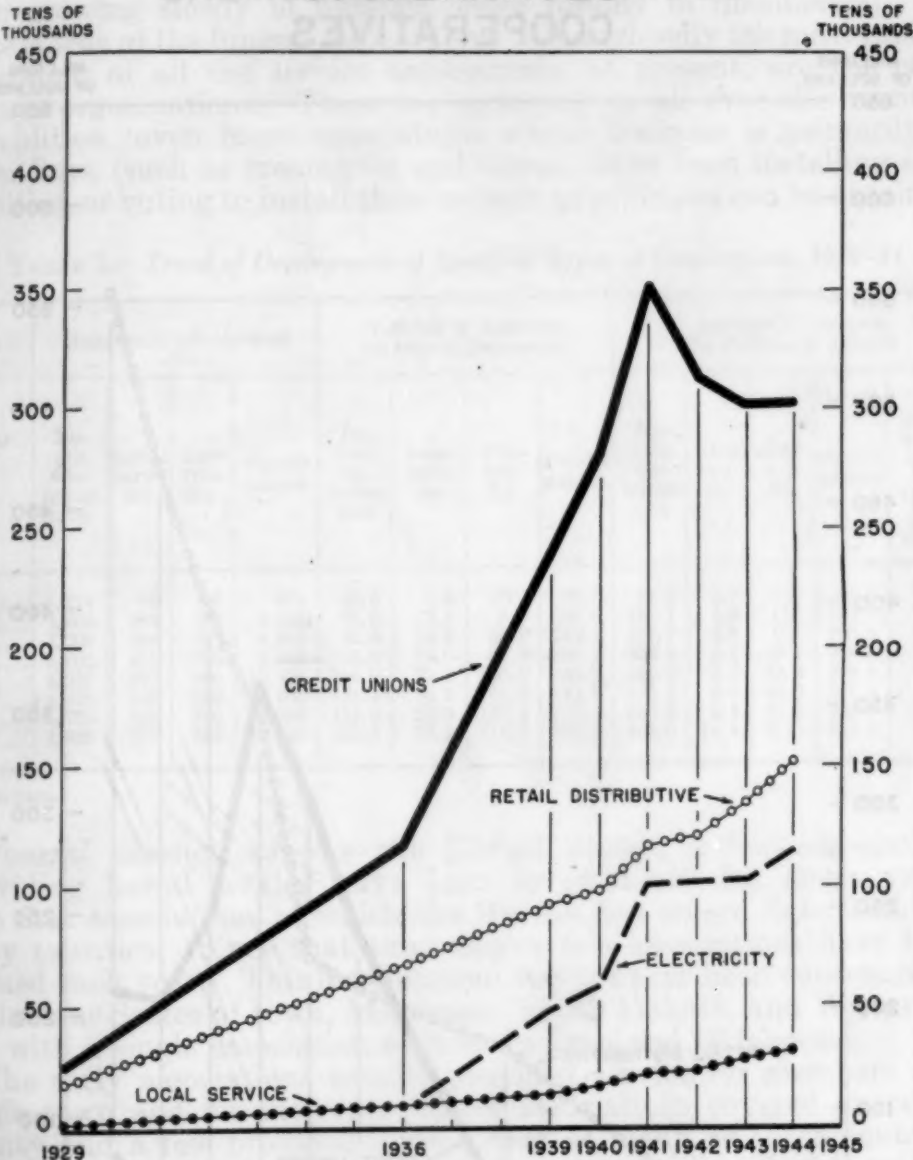
¹ Such as dairies, creameries, bakeries, etc.² Gross income.³ Local associations only; does not include associations of federated type (included with service federations) or funeral departments of store associations.⁴ Such as cold-storage, water-supply, recreation, printing and publishing, etc., associations.⁵ Almost all of these are REA associations, data for which were supplied by the Rural Electrification Administration.⁶ Patrons.⁷ Data are for 1936; no information on which to base later estimate.⁸ Actual figures, not an estimate.⁹ Policyholders.¹⁰ Figures do not agree with those in table 3, because those here given include estimates for nonreporting associations.¹¹ Includes wholesale (and retail, where such was reported) business; for own production see table 3.

Trend of Cooperative Development, 1929-44

The trend of development of several of the most important types of cooperative associations since 1929 is shown in table 2 and charts 1 and 2. Unbroken increases in both membership and business—although at varying rates—are shown for all except the credit unions. Until 1942 the credit associations were increasing at a faster rate than any of the other types; in that year, however, their statistics began to reflect the wartime conditions (restrictions on installment credit, diminishing supplies of consumer goods, higher earnings with consequent lessened need for credit, etc.). Their membership and business fell off precipitately in that year—a decrease that continued, though more slowly, through 1943. In 1944, however, the decline was checked and a slight upturn occurred.

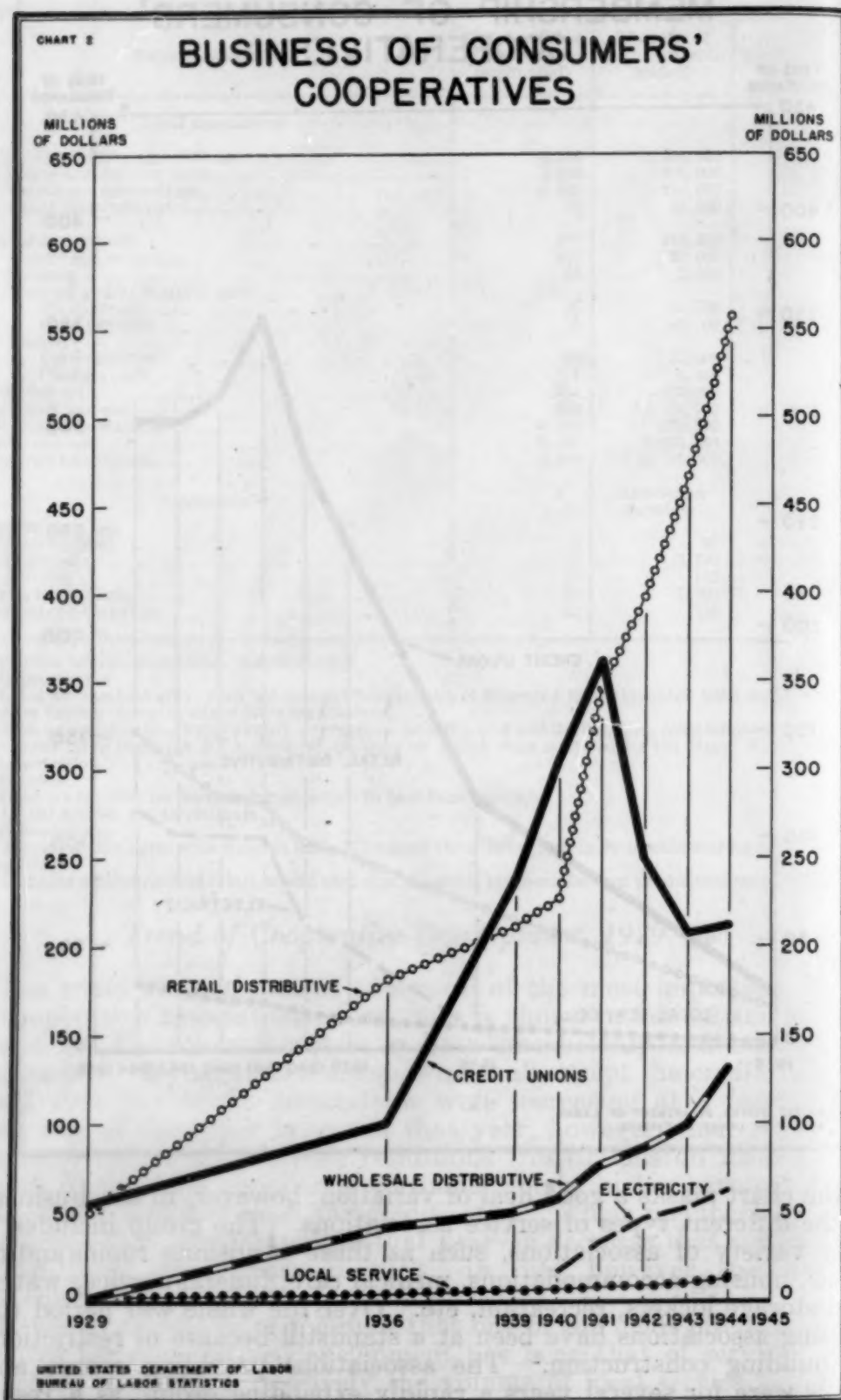
It would appear from the data that one of the fields offering great chances for cooperative development has been that of service. As indicated in chart 2, relatively the volume of local service business has remained almost at a dead level in the past 15 years. The line

MEMBERSHIP OF CONSUMERS' COOPERATIVES



in the chart masks a good deal of variation, however, in the business of the different types of service associations. The group includes a wide variety of associations, such as those furnishing rooms and/or meals, housing accommodations, medical care, funeral service, water, cold-storage lockers, recreation, etc. Over the whole war period the housing associations have been at a standstill because of restrictions on building construction.² The associations providing rooms and meals were for several years a rapidly expanding group, as a result of the growing popularity of cooperative rooming and boarding

² This field, however, promises to be an extremely active one in the near future. Numerous groups throughout the country are now organizing for action.



houses among students at the various educational institutions. The draft of young men from the colleges resulted in the closing of many of these houses, and this group of associations has for the past several years been barely holding its own. The medical-care associations have been growing slowly in number, more rapidly in membership; the same is true of the funeral associations. Undoubtedly the most rapidly expanding of all the service associations, at present, are the cold-storage organizations. These are springing up all over the country; in addition, even more associations whose business is primarily in other lines (such as creameries and stores) have been installing such facilities, or voting to install them as soon as priorities can be obtained.

TABLE 2.—Trend of Development of Specified Types of Cooperatives, 1929–44

Year	Number of associations				Number of members (in tens of thousands)				Amount of business (in millions of dollars)				
	Retail dis- tributive	Local serv- ice	Elec- tric- ity	Credit unions	Retail dis- tributive	Local serv- ice	Elec- tric- ity	Credit unions	Retail dis- tributive	Local serv- ice	Elec- tric- ity	Credit unions	Re- gional whole- sales (dis- tributive only)
1929.....	1,114	98	50	974	18.6	1.0	(1)	26.5	49.0	1.7	(1)	54.0	7.0
1936.....	3,600	266	275	5,440	67.8	9.4	8.3	121.0	182.7	4.0	(1)	112.1	41.4
1939.....	3,700	354	575	8,315	92.3	14.0	48.5	242.1	211.7	5.3	(1)	240.5	50.5
1940.....	3,700	415	700	9,510	98.9	16.9	57.5	281.7	228.3	5.5	16.7	302.3	58.7
1941.....	3,950	497	800	10,425	116.9	21.5	100.5	353.2	345.2	8.3	33.4	362.8	76.5
1942.....	4,025	526	810	10,601	121.4	24.2	101.0	313.9	398.5	8.5	45.0	251.4	87.2
1943.....	4,150	551	820	10,332	135.9	27.8	102.5	302.3	466.8	9.8	52.6	208.6	98.0
1944.....	4,285	577	850	9,099	152.5	31.9	115.0	302.8	557.0	11.1	61.0	212.3	140.5

¹ No data.

Funeral associations.—In the United States, a few associations providing burial service have been in existence for many years. The first associations of which the Bureau has record date from the early twenties. Since that time one or two associations have been formed each year. This development has thus far been concentrated in the four States of Iowa, Minnesota, South Dakota, and Wisconsin, but with a single association each in Indiana and Oklahoma.

The early associations usually provided service for members in a single town and its environs. Later associations covered an entire county and a few provided service over as many as three counties. The associations in Iowa and South Dakota are all still of these two types.

In order to expand the membership and utilize existing cooperative resources, local cooperative associations began to organize joint burial enterprises of which the associations themselves were the members. The individual members of these locals were then eligible for membership in the burial federation upon payment of a membership fee. Three such federations have been formed in Minnesota and 1 in Wisconsin. During the past few years several individual store associations have each started a funeral department. A Wisconsin association was the first to do this, in 1939; a second association in that State added its mortuary in 1944. An association in Montana and two of the three North Dakota associations that have

a funeral department provide caskets only, the funerals themselves being arranged for on contract with local undertakers. The third North Dakota association purchased a funeral establishment in 1943 and provides complete funeral service. A Minnesota store association voted in 1941 to establish a mortuary department, but decided to postpone this step until the end of the war.⁴

At least two new associations whose sole business is to be the provision of funeral service had been formed by the end of 1944 but had not yet gone into operation and are therefore not included in table 1.

Activities of Local Cooperatives in 1944

The accompanying tabulation summarizes the activities of the retail associations in 1944 in relation to 1943. Examination of these data in comparison with similar reports for earlier years indicates a larger *rate* of increase in membership among the stores and a smaller rate among the petroleum associations than in 1943 and 1942,⁵ but a considerably larger *proportion* of both types reporting increases. Possibly reflecting increased ration allowances, the petroleum associations showed an average increase in business in 1944 of 22.6 percent over 1943 (corresponding figures for 1943 and 1942 were 19.1 and 13.6 percent). The store associations, however, had an average increase in business of only 19.6 percent, as compared with increases of 28.8 and 30.8 percent in 1943 and 1942.

	<i>Stores and buying clubs</i>	<i>Petroleum associ- ations</i>	<i>Other types</i>
Membership:			
Percent of increase in total	25.6	14.4	23.1
Percent reporting—			
Increase in 1944	98.8	79.9	100.0
Decrease in 1944	1.2	20.1	-----
Amount of business:			
Percent of increase in total	19.6	22.6	13.7
Percent reporting—			
Increase in 1944	80.3	89.4	100.0
Decrease in 1944	19.7	10.6	-----
Net earnings:			
Percent which went from—			
Gain in 1943 to loss in 1944	6.4	.7	14.3
Loss in 1943 to gain in 1944	4.2	.9	-----
Percent reporting—			
Loss in both years	2.0	.5	-----
Increase in gain in 1944	62.3	74.5	85.7
Decrease in gain in 1944	25.1	23.3	-----

In the associations for which the Bureau had reports, net earnings for store associations which made earnings on the year's operations averaged 4.6 percent of sales; losses in the associations which went "into the red" averaged 1.5 percent of sales. For the petroleum associations the corresponding percentages were 7.8 and 6.7. Fewer than 1 percent of the reporting gasoline associations sustained losses,

⁴ In order to obtain the entire picture of cooperative provision of burial service, the data should include the mortuary operations not only of the local burial associations but also of the burial federations and the mortuary departments of the store associations. In the present report the local associations are shown in the first section of table 1, and the burial federations are included with the service federations in the second section of that table. The burial operations of the store associations, however, are included in the figures given for "stores" and are not separable from those figures.

⁵ See Bureau of Labor Statistics Bulletins Nos. 796 and 757.

but the losses in these cases were heavy in proportion to sales. As all of the petroleum associations with losses and nearly all of the store associations in this class had sales of less than \$50,000, possibly one factor in their difficulty was the small volume which resulted in too high a rate of overhead in relation to sales.

It should be remembered, in considering earnings of local associations, that for a large number of them a substantial proportion of the "earnings" was not the result of the retail distributive operations but consisted of patronage refunds on the goods they had bought from their wholesale association. Consumers Cooperative Association, in reporting the earnings of its member associations in *The Cooperative Consumer* (official organ of the wholesale) makes a practice of noting also what part of these consisted of refunds from the wholesale. Midland Cooperative Wholesale frequently does this also.⁶ In the various associations the wholesale's refunds constituted from about a fifth to as much as half of the amount reported by the local associations as earnings.

The wholesales are warning their member associations that even if earnings are high and the association is apparently prospering, this may be an illusion and may result from war conditions rather than from efficient management. Managers are being cautioned to keep down their inventories and outstanding credit. In this connection one wholesale reported that a trend toward higher accounts receivable, previously noted by it, was still continuing; it pointed out that falling prices or reduced consumer income at the end of the war might make some of these accounts worthless.

Information on patronage refunds is available only for 106 local associations—72 petroleum associations, 30 organizations running stores, and 4 service associations. The petroleum associations made refunds (in cash, shares, members' equity credits, etc.) amounting to 7.7 percent of sales; for the store associations the percentage was 4.1; and for the service associations 2.4. The refunds from this group of 106 associations amounted to \$990,748.

Insurance associations.—No general survey of insurance cooperatives was made for 1944, but data from a few organizations for which reports are available indicate a considerable advance. The three insurance organizations of the Ohio Farm Bureau group, writing life, fire, and automobile insurance in 12 States⁷ and the District of Columbia all had substantial gains in business; at the end of 1944, life insurance in force amounted to 104½ million dollars, a gain of over 23½ million dollars over the preceding year, and premium income in 1944 totaled \$2,709,257. Premiums written on automobile coverage totaled \$10,479,883 (21 percent over 1943) and assets increased to \$13,764,626; losses, however, were exceptionally high, amounting to \$5,947,329.

In North Dakota, National Union Security Association (the insurance organization of the Farmers' Union cooperatives, operating in 11 States⁸) reported total insurance in force amounting to \$20,369,536, as compared with \$18,793,038 in 1943; assets increased from \$792,930 to \$830,823. Death claims, paid on 107 policies, amounted to \$91,236, and sickness and accident benefits to \$2,855 (paid to 52 members).

⁶ This practice has the effect of emphasizing the practical benefits accruing from membership in and patronage of the wholesale.

⁷ Connecticut, Delaware, Maryland, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Vermont, Virginia, and West Virginia.

⁸ And applications pending in 4 others.

A net gain of \$45,727 was realized on the 1944 business. Policyholders numbered 22,562.

In Nebraska the Farmers' Union Industries Mutual, which insures cooperative enterprises against fire, storm, etc., reported insurance in force amounting to \$9,468,400; this was an increase of \$318,360 as compared with the previous year. Assets totaled \$44,013. Premium income totaled \$31,708. Losses amounted to \$1,428—\$1,393 for fire damage and \$35 for wind damage. A net saving of \$6,670 was made on the year's operations.

Group Health Mutual, a cooperative providing hospital insurance in Minnesota and Wisconsin, increased its membership from 10,500 to 23,000 (and by the middle of February 1945 to over 25,000). Premium income rose from \$82,000 in 1943 to \$137,000 in 1944. The surplus increased from \$18,449 to \$28,685. Benefits paid during the year totaled \$70,562.

Activities of Central Organizations

The membership and business of the central organizations providing supplies at wholesale, numerous kinds of service, and manufactures in increasing variety continued their advance in 1944. Table 3 summarizes the various activities, earnings, and patronage returns for these organizations in that year.⁹ A distributive and service business of over 151 million dollars is shown in the table. Own production from cooperative plants constituted (in value) nearly 43 percent of the total business. It cannot be said by any means, however, that 43 percent of all goods sold were made in cooperative factories, for as yet the manufactures are largely concentrated in a few lines, of which petroleum products, feed, and fertilizer are by far the most important.

Nearly 8 million dollars was returned in patronage refunds on the activities of these central federations.

TABLE 3.—*Summary of Activities of Cooperative Distributive, Service, and Productive Federations in 1944*

Type of federation	Number of federations	Member associations	Amount of business			Value of own production	Net earnings from all departments	Patronage refunds from all departments
			Wholesale distributive	Service	Retail distributive			
All types.....	53	(1)	\$136,031,029	\$11,652,806	\$3,707,829	\$64,994,484	\$8,242,624	\$7,994,839
Wholesales:								
Interregional.....	1	18	6,577,200			1,538,000	41,517	41,517
Regional.....	22	3,393	126,959,149	3,774,487	3,707,829	51,521,512	7,813,643	7,654,074
District.....	9	112	2,494,680	157,900	(2)	786,181	137,311	108,811
Service federations.....	15	932		7,720,419			98,206	79,932
Productive federations.....	6	128				11,148,791	151,947	110,505

¹ Membership should not be totaled, as some local associations are members of several federations.

² Includes some retail business.

³ A small amount of retail business is included in wholesale figure.

⁹ Detailed data on all these types of federations will be given in a forthcoming bulletin.

Social Security and Welfare

Brazilian Social Security Law, 1945¹

BRAZIL has enacted an organic law² which provides a basic framework for all social-security legislation in that country. Among its principal features is a provision for the creation of a single social-security institute, which will consolidate the administration and activities of the 6 institutes and 32 funds now in existence. In addition, the law extends coverage to virtually all income receivers, including such formerly excepted groups as farm workers and domestic servants. Excluded are members of the armed forces, and Federal, State, and municipal employees. The statute provides for an elaboration of the types of assistance to be offered, which will include services in kind, such as food, clothing, housing, and medical care, in addition to cash benefits.

Contributions and benefits.—Employers and employees are to make equal contributions to defray the cost of social security. The Federal Government is to contribute a sum equal to that paid by either of these groups, plus a minimum amount of 1 percent of the ordinary receipts in each fiscal year. Other contributors will be the States, Territories, Federal District, and municipalities, which will furnish a minimum amount of 1 percent of the respective ordinary receipts in each fiscal year.

The funds are to be used for benefits in the fields of social security and general assistance. The social-security provisions are designed for the "effective economic protection of the insured and his dependents," for such periods as they might not be able, by reason of invalidity, old age, or domestic condition, to carry on a remunerative activity. By means of "social" assistance, the law proposes to improve standards of living by meeting the minimum requirements of the insured and dependents as to feeding, housing, clothing, and health. At the same time, aid is to be provided to the family and children in the form of marriage, prenatal, and child-care assistance, by means of bonuses, services, or in kind. Resources directed toward public assistance will be employed in the proportion of a third throughout the Nation, a third to meet the necessities of such services within each State, and a third in each municipality in proportion to its contribution.

Social-security and social-assistance benefits may be in money, services, or kind, but the cash benefit must not be less than a third of the total sum. Social-security payments shall be proportional to half of the individual contribution for the 3 years preceding the award of the benefit, and never less than 70 percent of the value of the mini-

¹ Data are from report by Edward J. Rowell, labor attaché, United States Embassy, Rio de Janeiro, June 7, 1945 (No. 355).

² Decree law No. 7526 of May 7, 1945.

mum regional wage. Insurance against industrial accidents will be covered by special contributions from the employers.

Administration.—Powers of administration are to be vested in the Institute of Social Service for Brazil (*Instituto dos Serviços Sociais do Brasil*—ISSB), which will be headed by a president chosen by and directly subordinated to the President of Brazil. Assisting the president of the ISSB will be a Technical Council, which is to consist of four representatives from the Ministry of Labor, Industry, and Commerce, the Ministry of Education and Health, the Ministry of Agriculture, and the Ministry of Finance, respectively, two technicians chosen by the President of Brazil, and two representatives of the insured.

In order to implement the new plan, a temporary Organizing Commission (*Comissão Organizadora*) of the ISSB is provided for, to be appointed by the President of Brazil and directly responsible to him. It is to make studies and submit plans for developing the new schemes and for coordinating existing and new services and agencies, as a basis for legislation). During the transition period, the commission is to exercise joint administrative supervision of the existing institutes and funds for retirement and pensions.³ The commission is to report within 6 months.



Nursery Schools for Working Mothers' Children in Soviet Union⁴

AT A time when so many Russian mothers have full-time employment in work of national significance, special provisions have been made and are being increased for the safeguarding of their children's health and the training of proper habits and behavior.

Approximately two-thirds of all nursery schools in the Soviet Union are administered by industrial, trading, and other enterprises under the various People's Commissariats. The remainder are managed by the People's Commissariats of Education of the various Soviet Republics, which also have general supervision over the training of nursery-school teachers.

In the 1944 budget, the sum of 108,600,000 rubles was allocated for the construction of additional nursery schools. It was stated that the children cared for in such schools in 1944 would number 1,837,480. The furniture in these institutions is especially designed for children, and the linen, household articles, and toys are made to careful specifications. A special committee on children's toys is presided over by the People's Commissar of Education for the Russian Socialist Federated Soviet Republic.⁵

³ For an account of existing systems of social security and nutrition and housing services, see *Industrial Labor in Brazil*, by Albert H. Berman, U. S. Office of the Coordinator of Inter-American Affairs, Washington, 1944 (mimeographed). For 1944 developments, see *Progress of Social Security in the Americas in 1944*, in *International Labor Review* (Montreal), June 1945.

⁴ Data are from U. S. S. R. Information Bulletin (Washington), September 22, 1944.

⁵ One of the 16 republics which form the Soviet Union.

The expansion in the number of nursery schools calls for additional contingents of trained teachers.

This year, in the Russian S. F. S. R. alone, 1-year courses in preschool education will be provided for 2,000 persons, and 3-month courses for 6,000 persons. In September, 20 nursery-school training centers will be opened, accommodating 1,860 students. Six teacher-training schools are opening preschool departments, with places for 240 students. Departments of preschool education have been established at the Kazan, Gorky, and Molotov pedagogical institutes. In addition, there are many bureaus, correspondence courses, and evening courses where nursery-school teachers receive instruction in the latest methods of nursery-school education.

Many of the Soviet kindergartens now arrange for the washing and darning of the children's clothes at the kindergartens.

The war has resulted in greater recognition by preschool teachers of their responsibility toward their small charges, and has compelled these educators to exercise greater initiative and ingenuity. In the areas liberated from the Germans, as well as in reception regions, the teachers must reestablish normal conditions for these little boys and girls under the most unprecedented circumstances.

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The number of total and partial employees and the annual percentage change are shown in the accompanying table for 1938-44.

Year	Total employees	Partial employees	Percentage change
1938	1,000,000	500,000	0
1939	1,100,000	550,000	10
1940	1,200,000	600,000	10
1941	1,300,000	650,000	10
1942	1,400,000	700,000	10
1943	1,500,000	750,000	10
1944	1,600,000	800,000	10

Industrial Injuries and Health

Industrial Accidents and Health in British Industries, 1943

STABILIZATION and adjustment of available manpower to meet war requirements in Great Britain resulted in a further transfer of women to the more dangerous munitions industries. As a result, during 1943, accidents to women increased slightly. However, the Chief Inspector of Factories¹ noted in his annual report that women had become accustomed to their jobs and had developed the mechanical sense and ability to handle machines. The total number of fatal and nonfatal accidents dropped in 1943 for the first year since 1938. Although longer hours than usual were being worked in some factories vital to the war, the general tendency was toward reduction in working time. It was stated in the report that facilities for study and research in the anticipation, assessment, and prevention of occupational risks to health had not been commensurate with the national needs. The inspectors considered that personnel relationships were satisfactory in approximately 70 percent of the factories employing more than 250 persons, definitely unsatisfactory in 5 percent, and in the remaining 25 percent they were described as indifferent. Steady progress was made during the year in the development of canteens, emphasis being placed on improvement in existing canteens rather than on the provision of new ones.

Industrial-Accident Record

The number of fatal and nonfatal accidents and the annual percentage changes are shown in the accompanying table for 1938-43.

Fatal and Nonfatal Accidents Reported to British Chief Inspector of Factories, 1938-43

Year	Fatal accidents		Nonfatal accidents	
	Number	Percent of change from previous year	Number	Percent of change from previous year
1938	944		179, 159	
1939	1, 104	+17. 0	192, 371	+7. 0
1940	1, 372	+24. 0	230, 607	+20. 0
1941	1, 646	+20. 0	269, 652	+17. 0
1942	1, 363	-17. 0	313, 267	+16. 0
1943	1, 220	-10. 5	309, 924	-1. 1

¹ Data are from Annual Report of the Chief Inspector of Factories of Great Britain for the year 1943 (Great Britain, Ministry of Labor and National Service, London, 1944, Cmd. 6563); and British Ministry of Labor Gazette (London), November 1944.

The decline of 10.5 percent shown in fatal accidents in 1943 followed a 17-percent decrease in 1942. For nonfatal accidents the 1.1-percent drop in 1943 was the first to occur in wartime. The Chief Inspector of Factories stated that the continued drop in fatalities and the reduction in the proportions of two classes of accidents that are very likely to result in serious injury (caused by power-driven machinery and falls of persons) "points to a real advance in accident prevention, apart from the other causes noted."

In spite of an increase of 1,821 in number of accidents to adult women in 1943 and transfers of women to the principal armament and munitions industries from those with a lower accident rate, the report under review estimated that the accident rate for women declined by approximately 3 per 1,000 in the munitions industries, which are the chief sources of accidents to women. Accidents caused by hair becoming entangled with moving machinery continued, and it was stated that the wearing of caps over the hair and the fencing of the most dangerous machinery did not provide adequate safeguards. Fencing of all dangerous machines was needed.

As nearly as can be estimated, men, who are exposed to the main hazards of industrial accidents, had an accident frequency nearly double that of women. During 1943, the accident frequency rate for boys was approximately 6 per 1,000 more than for men; for girls the rate was 7 per 1,000 below that of women. For boys and girls the rate was estimated as about the same in the 2 years 1942 and 1943.

The report pointed out that it would be difficult to give precise reasons for the reduction in accidents without figures showing man-hours worked. Declines in accidents were more pronounced in the late than in the early months of the year; as hours were being reduced in the same period, significance was attached to the drop in accidents at that time. Also, the increase in number of workers employed in factories during 1943 was relatively small compared with previous years. Transfers were made from less-dangerous to more-dangerous work, but the transferees soon settled down to the new jobs because of their experience in other factory work.

Hours of Employment

An inquiry made by the Ministry of Labor and National Service, comparing weekly hours of work in July 1943 and January 1944,² was cited to exemplify the tendency toward restriction of working time in 1943. There has been increasing realization that production is not in direct ratio to the hours worked.

Various cases were cited by the Chief Inspector to show the interplay of proper management, arrangement of wage system, and hours of work. One firm employing 300 persons produced 50 pieces per week, with the men working a 7-day week of 60 to 70 hours. Under a change in management the number of workers was reduced by a fourth and hours were lowered to 54 weekly. Production rose by 75 to 100 percent, and in the week of peak production 140 articles were manufactured. Wage troubles were avoided by the introduction of a bonus system whereby wages remained at the previous level.

Special orders continued to permit extension of hours of employment of women and young persons during 1943. One general order

² For a summary of this study, see the Monthly Labor Review for November 1944 (p. 1061).

was introduced to facilitate shift working of women in electricity-generating stations, increasing the number of such orders in force to a total of four. At the end of the year, 23,427 factories were working under such orders; in addition, 1,605 factories were dealt with on an individual basis, bringing the total to 25,032 factories having emergency permission to exceed the hours fixed by the Factories Act. This total represented an increase of 4,435 over 1942. Near the end of 1943, a representative committee of employers and workers recommended that there should be no departure from the hours established by the Factories Act for young persons, except in cases of proved necessity on work of urgent national importance. In such cases the maximum hours were never to exceed 48 weekly for young persons under the age of 16 years, and 52 weekly (55 in exceptional cases) for those aged 16 to 18 years. Factory inspectors were engaged in bringing emergency authorizations within these limits during early 1944.

Industrial Health

The year 1943 was one of "technical effort paralleling a new high peak of production on the industrial front." There was an acute scarcity of men and women with adequate professional and technical qualifications who were also proficient in the science and practical aspects of industrial health. On the credit side, a remarkable growth in health consciousness was noted in the industrial population, as to both life at work and life outside work.

Details are shown in the report as to cases of industrial poisoning and disease, and special attention is called to the effects of radioactive substances and X-rays in industry and of the use of ethyl gasoline in industrial processes. During 1943 the cases of gassing reported were 695, compared with 776 in 1942 and only 184 in 1939; deaths resulting totaled 27 in 1943, 25 in 1942, and 11 in 1939. Cases of dermatitis voluntarily reported aggregated 8,926 in 1943 and 8,802 in 1942.

Personnel Management and Welfare

Under the terms of the Factories Order of 1940 (Medical and Welfare Services), the Chief Inspector was empowered to direct individual firms to appoint officers to supervise the welfare of their factory employees. Such powers were used only in 16 cases, but the fact that the order existed was of great assistance by indicating the importance attached to the subject by the Ministry of Labor and National Service. In January 1944, of 4,774 factories (each employing more than 250 workers and therefore likely to come within the scope of the order) 3,395 employed 5,478 officers concerned with personnel and welfare matters. As already stated, personnel relations were considered satisfactory in about 70 percent of these factories.

Canteens

In December 1943, the number of factories having canteens totaled 10,577, as compared with 8,481 in December 1942; for docks the totals were 176 and 160, respectively; and for building sites, 782 and 868, respectively. Factories employing fewer than 250 persons are not required to install canteens. Nevertheless such installations increased

by 37.7 percent during 1943. In general, efforts were directed toward giving better-balanced meals, a wider choice of foods, and improved cooking methods to preserve the essential food content in meals served. Attention was also given to the provision of "snack" services.



Sickness Absence Among Women in Great Britain, 1942

A STUDY of sickness absence among 20,000 women workers during the second half of 1942, made by the Medical Research Council of Great Britain, showed absenteeism representing 7.8 percent of the total number of possible days of work.¹ Diseases of the respiratory and digestive groups, and functional nervous disorders, including "fatigue," were major factors. On the average, sickness absence among married women exceeded that of single women by 65 percent. The number of days absent was higher in the age group 30 to 50 years than in any other. Women with service of 2 to 3 years had fewer but longer absences than shorter-service employees. Type and conditions of work influenced the volume of sickness absence, the incidence being greater for production workers than for examiners and lowest for clerical employees. In evaluating the study, the Medical Research Council stressed the importance of keeping records of sickness absence, and the value of such records as an index of industrial health.

Volume and Causes of Absence

For every 100 women in the sample covered, an average of 84.2 cases of sickness occurred in the last 6 months of 1942. For the whole group of women, the number of days of sickness per worker averaged 14.45. However, as 45.3 percent of the women had no sickness absence whatever during the period, the average number of days per worker was much greater for those who had such absences.

Of the 84.2 cases of sickness absence per 100 women, 28.6 percent were caused by diseases of the respiratory system (almost two-thirds of which were colds and influenza). Digestive ailments were next in volume, accounting for 13.7 percent. Nervous disorders made up 11.8 percent of the total, and "fatigue" another 5.8 percent. Other important causes of absence were diseases of the locomotory system, representing 6.9 percent (of which approximately half were caused by rheumatism), and those of the circulatory system (mainly anemia), making up 5.3 percent. The causes of the remaining 27.9 percent of total absences were varied, and included accidents at work and away from work, miscellaneous reasons, and cases in which no diagnosis was given.

Sickness of Married and Single Women

Married women averaged 17.45 days of sickness absence as compared with 10.57 days for single women. In general, for these two categories, the relative amount of sickness by disease groups was similar to the relative number of absences. The differences in length of the individual absences for married and single women were most marked with regard to accidents, and diseases of the generative, circulatory, and locomotory groups.

¹ Information is from A Study of Certified Sickness Absence Among Women in Industry, by S. Wyatt, London, Medical Research Council, 1945 (Industrial Health Research Board Report No. 86).

Average Length of Individual Absences of Married and Single Women Workers in Industry, Great Britain, Last Half of 1942

Item	Total	Married workers	Single workers
Number of women workers covered.....	4,542	2,545	1,997
	<i>Days</i>	<i>Days</i>	<i>Days</i>
All disease groups.....	17.1	17.8	15.9
Respiratory.....	13.4	13.4	13.3
Digestive.....	17.9	17.6	18.4
Circulatory (including diseases of the blood).....	22.4	24.0	19.3
Locomotor.....	18.1	19.5	15.0
Nervous.....	18.0	18.2	17.4
"Fatigue".....	26.4	26.6	26.2
Generative.....	25.0	26.4	20.5
Skin.....	16.2	16.6	15.6
Accidents at work.....	17.1	18.3	13.7
Accidents away from work.....	18.3	20.8	13.8
Miscellaneous.....	13.8	13.8	13.7
No diagnosis.....	18.8	19.0	18.3

Extended Absences

A substantial proportion of total time lost because of sickness was caused by long absences. Among the women surveyed, 16.3 percent were responsible for approximately two-thirds of the total number of days lost. Single absences in excess of 28 days in the 6-month period were recorded for 14.4 percent of both groups combined, 17.9 percent of the married women, and 9.9 percent of those who were single. Diseases of the respiratory and digestive systems and those resulting from "nerves" and "fatigue" were the most frequent causes of such absences.

For married women the percentage having long absences tended to decrease as age increased, except in the age group 35 to 44 years. Single women showed the opposite tendency, the percentage with long absences rising with age.

The duration of service under war conditions also was a factor in the length of absences. For married women, the percentage with long absences rose from 17.3 for those having under 1 year of service to 18.3 for those having 1 year and under 2 years of service, and to 19.7 for those having 2 years and under 3 years of service. The single women having long absences represented 9.7 percent of the total in the classes under 1 year, and 1 year and under 2 years, and 10.9 percent of those having 2 and under 3 years of service.

In all, 610 women were discharged on medical grounds during the 6 months. They represented approximately 2.5 percent of the total number of women employed (3.13 percent of those who were married and 1.71 percent of the single women).

Sickness Absence and Age

For women as a whole, the absence frequency increased up to the age group 25 to 29 years and then began to decline, slowly at first, but more rapidly afterwards. The general trend was the same for both married and single women. However, the rate of change was lower for married women. Taking into account differences in the number of married and single women in different age groups, the Medical Research Council concluded that "age for age, married women were absent much more frequently than single women," owing to the "effects of the additional strains and stresses of married life."

Industrial Relations

Union Agreements in the Tobacco Industry in Effect January 1945¹

APPROXIMATELY 90 percent of the wage earners employed in the manufacture of cigarettes, smoking and chewing tobacco, and snuff and about 50 percent of those in the manufacture of cigars are employed in plants which have negotiated agreements with national or international unions. The present report analyzes the provisions of 12 agreements covering about 80 percent of the workers in the manufacture of cigarettes, smoking and chewing tobacco, and snuff and 16 agreements covering nearly 70 percent of those in the manufacture of cigars who were under collective-bargaining agreements at the beginning of 1945.

Manufacture of Cigarettes, Smoking and Chewing Tobacco, and Snuff

Approximately 90 percent of the workers in cigarette, smoking and chewing tobacco, and snuff manufacture work in plants which have agreements with national or international unions. Almost all the cigarette companies are organized, the unorganized plants being small establishments in the smoking and chewing tobacco and snuff branches of the industry.

The Tobacco Workers' International Union (AFL) has negotiated agreements covering almost three-fourths of the organized workers; and the Food, Tobacco, Agricultural and Allied Workers Union of America (CIO) has agreements with two companies (the R. J. Reynolds Tobacco Co. and P. Lorillard Co. plants at Middletown, Ohio), which cover slightly more than a fourth of the organized workers.

The following is an analysis of 12 agreements covering about 32,000 workers, which represent about 80 percent of the total number under agreement at the beginning of 1945. The agreements usually cover maintenance and plant-protection employees as well as production workers, but executives and supervisory, office, and clerical employees are generally excluded from the scope of the agreements, as are seasonal workers in 2 cases.

UNION STATUS

Type of recognition.—All but 2 agreements include provisions regarding union membership. One agreement provides a closed shop and requires that all employees be hired through the union; 5, covering almost a fourth of the workers, provide for union shops but

¹ Prepared in the Bureau's Industrial Relations Division by Eleanor T. Royer. A more complete report will appear in a forthcoming bulletin.

do not require hiring through the union; 4 agreements, covering two-thirds of the workers, have maintenance-of-membership clauses.

Check-off.—Automatic check-off of union dues is specified in 9 agreements covering about 80 percent of the workers. One other agreement, covering a small company, permits individual employees to authorize deductions from their pay for union dues.

WAGE PROVISIONS

These agreements contain very little information about specific wage rates, and none refer to incentive systems. Only 1 agreement, covering a small company, specifies plant-wide minimum wage rates; these are 78 cents an hour for male employees, 68 cents for female machine workers, and 58 cents for other female workers. Another agreement contains detailed occupational listings by department, with the lowest rates at 58 cents an hour for women and 70 cents for men. Both these agreements (as well as 2 others) prohibit wage differences based on sex alone.

Pay for waiting time.—All but 2 agreements with small companies stipulate that employees are to receive their regular rate of pay if required to wait in the plant when machinery break-down or other unavoidable circumstances prevent them from continuing work.

Shift provisions.—Only 4 agreements refer to night shifts. Two with the largest companies (American Tobacco Co. and R. J. Reynolds Tobacco Co.) require night-shift bonuses—8 percent above the regular hourly rate in one case, and 4 cents per hour in the other. The former is subject to approval of the National War Labor Board.

Transfer rates.—Several agreements protect an employee's earnings when he is transferred temporarily to another job, by specifying that he is to continue to receive the rate of the job from which he was transferred. According to a few agreements, however, he receives the prevailing rate of the job to which he is transferred. Most of the agreements also make provision for permanent transfers, generally indicating that the employee is to receive the rate of the job to which he is transferred.

Report pay.—Two agreements require payment for a minimum number of hours, 4 hours in one case and 2 in the other, when employees report for work at their usual hour without having been notified that there is no work; and another requires that employees asked to report before their scheduled time be paid time and a half for all time worked before their regular starting time.

Interim wage adjustment.—Three agreements allow either party to reopen the question of wage adjustments during the term of the agreement, one at a specified time 6 months after the signing of the agreement, and the others at any time in the event of change in the "Little Steel" formula or because of any "unusual circumstance." Five agreements also mention individual wage-rate adjustments during the term of the agreement, 4 of them specifically naming adjustments because of increase in machine speed or work load.

HOURS AND OVERTIME

All the agreements provide for time and a half for work in excess of an 8-hour day or 40-hour week, although about three-fourths of them exclude certain occupations, such as watchmen, power-plant employees,

and other maintenance workers, from the daily hours provisions and the week-end and holiday premium rates. Five agreements which include seasonal employees specifically exempt them from all hours, overtime, and holiday rate provisions under the seasonal exemptions provided by the Wage and Hour Law.

One agreement requires payment of time and a half for all work performed on the sixth day of the regular workweek, and two others require payment of double rates for Saturday work if more than 4 hours' work is done. Nine agreements require payment of double rates for Sunday work, and two specifically provide double time for Sunday work when it is the seventh consecutive day in the workweek. (If any of these companies were doing war work, Executive Order 9240, as a matter of course, has superseded agreement provisions not in accordance with it.)

VACATIONS AND HOLIDAYS

Vacations.—Annual paid vacations are granted to regular employees who meet certain qualifications under 9 of the 12 agreements analyzed; the remaining 3 grant all employees with a year's continuous service a bonus of 2 weeks' pay at the end of the year.

A single vacation period after a qualifying term of service is provided by 6 agreements, 3 of these granting 2 weeks' vacation after 1 year's service, 1 agreement allowing 1 week after 6 months, and the other 2 agreements, 1 week after 1 year's employment. One of the latter grants, in addition, a Christmas bonus equal to 40 hours' pay.

Of the 3 agreements with graduated plans, that of the American Tobacco Co. provides 1 week's vacation after 6 months' service, and that of the R. J. Reynolds Tobacco Co. and of another firm, 1 week after 1 year; 2 weeks' vacation after 1 year's service is provided in the American Tobacco agreement and after 5 years' service in the other 2 agreements.

Holidays.—None of the agreements analyzed grant pay for holidays not worked, but all establish premium rates for work done on specified holidays—double time in the case of 9 agreements (which also require double time for Sunday work) and time and a half in accordance with Executive Order 9240 for the other 3.

LEAVE PROVISIONS

None of the agreements provide for paid sick leave, although a few indicate that an employee will not lose seniority because of absence caused by illness. Several agreements provide limited leave of absence for union business and for other personal reasons.

SENIORITY RULES

Seniority rights, granting preferential treatment based on length of service, are found in all the agreements studied. In most cases these rights are not acquired until a probationary period, generally 3 months, has been served; and in 3 agreements seasonal employees who handle leaf tobacco are excluded from all seniority rights except that they are given preference over new applicants for regular employment

if they are qualified. Almost all the agreements include clauses protecting the seniority rights of employees who leave for military service. Generally, they merely state that any employee who is honorably discharged will be rehired "with seniority rights unimpaired" or in accordance with the Selective Service Act.

According to all the agreements, the plant is the ultimate unit to which accrual of seniority applies, although 5 provide a combination of departmental and plant-wide seniority with respect to transfers; one of these 5 also defines seniority for the purpose of lay-off as length of service in the plant, but for the purposes of promotion as length of service in the department.

Seniority is the sole determining factor in the selection of workers for lay-off and rehiring in all except the Reynolds agreement, which indicates that lay-offs and reemployment are to be determined by seniority if other qualifications such as skill, efficiency, and responsibility are equal. Only one agreement mentions work sharing and provides that if lay-off becomes necessary in a department the hours of work will be reduced if possible.

Competence is the primary consideration in making promotions, in almost all the agreements, with seniority applicable only when the competence and ability of the applicants are approximately equal.

ADJUSTMENT OF DISPUTES

Strikes and lock-outs are banned for the duration of the agreement in 2 agreements, and in 6 others stoppages are prohibited until all the steps in the grievance machinery have been exhausted. Four of the latter agreements do not provide for arbitration; the remaining 2 include arbitration machinery.

Each of the 12 agreements establishes formal machinery for the adjustment of grievances, and 6 of them (covering about two-thirds of the employees) provide for arbitration. According to half of the agreements, the union representative takes the complaint to the foreman; in several, the aggrieved employee has the option of taking the complaint directly to the foreman himself or being represented by his union representative; and according to 1 agreement, both the employee and the representative take the matter to the foreman. Grievances not settled at this stage generally are dealt with by successively higher union and company officials including, in 2 agreements, the participation of international union officials.

Arbitration.—In the 6 agreements which contain arbitration clauses, the arbitrator or board of arbitration is chosen at the time of the dispute. Five agreements establish a tripartite arbitration committee, consisting of one or two representatives chosen by each of the parties to the dispute and an impartial chairman selected by the committee itself or by the National War Labor Board. The sixth specifies that the Conciliation Service of the U. S. Department of Labor is to designate the arbitrator.

Discharge.—The right of the union to appeal cases of allegedly unjustified discharge is granted in all but two agreements, all of them providing for reinstatement with back pay for all time lost, for the worker found to be unjustly discharged.

Cigar Manufacture

Approximately 18,000 wage earners, representing about half of the workers in the cigar industry, are covered by agreements negotiated by affiliated unions. The Cigar Makers' International Union of America (AFL), one of the oldest organizations in the trade-union movement, has agreements covering slightly more than half of the organized workers, with most of its strength concentrated in the Florida area. The Food, Tobacco, Agricultural and Allied Workers Union of America (CIO) has recently begun organizing workers in the New York, New Jersey, and Eastern Pennsylvania area and now has agreements covering slightly less than half of the organized workers in the industry.

The following discussion is based on an analysis of 16 agreements covering about 12,000 workers and representing nearly 70 percent of the total number of workers under agreement. One of these agreements, which was negotiated by the Cigar Makers' Union with the Cigar Manufacturers' Association of Tampa, covers approximately 15 companies in that city which employ more than a third of the workers under the 16 agreements studied. Generally, certain occupational groups, such as office and clerical workers and supervisors and foremen, are excluded from the scope of the agreements.

UNION STATUS

Union membership is required as a condition of employment under 8 agreements, which cover over half of the workers under the agreements studied. Five of these, among them the agreement with the Cigar Manufacturers' Association of Tampa, specify closed-shop conditions and require all employees to be hired through the union. Three agreements, including that with John H. Swisher & Son, Inc., establish union shops; the Swisher agreement provides, in addition, that "the company agrees to give preference of employment to union members." Another of these 3, while stating that all new employees must join the union within a specified period, exempts maintenance employees, floor ladies, shipping clerks, and members of any other union and allows them to pay a "service" fee equal in amount to union dues.

Five agreements, covering over 30 percent of the workers, require maintenance of membership for employees who were members when the agreement was signed or who later become members. The remaining 3 agreements have no membership requirements but merely grant the union sole bargaining rights.

Check-off.—Six agreements provide automatic check-off of union dues, and in 4 others individual employees may authorize deductions from their pay for union dues.

WAGE PROVISIONS

Minimum rates.—Only 5 agreements, 2 of them with large companies, contain plant-wide minimum wage rates: One specifies 65 cents an hour; 3 specify 50 cents an hour for all employees; another specifies 50 cents an hour for male and 45 cents for female hourly paid employees, but only 40 cents an hour as the basic rate for piece-work jobs. One of these provides for a 5-percent increase, pending approval by the National War Labor Board.

Dead-time pay.—Half of the agreements, covering almost half of the workers, provide pay during waiting time when machinery break-down or other circumstances halt work temporarily.

Incentive wages.—Payment on a piece-rate basis for certain classes of workers is indicated in 11 of the 16 union agreements. Advance participation by the union in piece-rate setting is specifically provided in 3 agreements; the Tampa Association agreement provides for a joint equalization committee, made up of union and employer representatives, to settle any question regarding the price scales of the so-called "Cartabon." The second agreement provides that any new job is to have a price established by the union and company before it is put into effect; and, under the third, new or revised schedules of piece work rates, unless previously approved by the union, are to be posted 5 days before they become effective, with differences of opinion to be settled through the regular grievance procedure.

Interim wage adjustments.—Provisions for general wage changes during the life of the agreement are found in 6 agreements, 5 of which allow the wage scale to be reopened for negotiations at any time in the event of a change in conditions in the industry or in Government wage policy; the sixth agreement allows wage changes every 6 months during its term.

Transfer rates.—A few agreements protect an employee's earnings when he is temporarily transferred to another job or division; one agreement stipulates that an employee permanently transferred is to receive no reduction in rate if the transfer is made at the company's request.

Minimum call and call-back pay.—Eight agreements, covering almost 40 percent of the workers, provide payment for a minimum number of hours to employees called to work or who report for work at their regular time but for whom no work is available. Four agreements guarantee a minimum of 4 hours, 3 provide 2 hours, and 1 provides that if it is proved to the satisfaction of the company that the lack of work is the company's fault, the employee is paid for a full 8-hour day; otherwise the employee is paid call pay for 1 hour. Two agreements provide payment of time and a half for all time worked by an employee called back to work after completing his regular shift.

HOURS, OVERTIME, AND WEEK-END AND HOLIDAY RATES

Most of the agreements provide for a regular 8-hour day and 40-hour week and for payment of time and a half for work in excess of these hours. One agreement provides daily overtime after 10 hours. The agreement with John H. Swisher & Son, Inc., is the only one which indicates that more than one shift is worked, and it does not specify any differential or bonus for second-shift work.

Only 2 agreements specifically refer to Executive Order 9240 with respect to premium rates for week-end and holiday work, and 1 provides Sunday and holiday rates which are to be substituted when the order is terminated. Four other agreements specify time and a half for Saturday work; 2 provide time and a half and 5 double time for Sunday work. If these companies were doing work relating to the prosecution of the war, these provisions, of course, were superseded by Executive Order 9240.

Holidays.—Five agreements provide pay for holidays not worked, 4 of them designating 6 holidays and 1 designating 4 holidays. Most

of the other agreements which do not provide pay for holidays not worked provide premium rates for work done on specified holidays, generally 6. Half of them require time and a half, and the others require double time.

A very few agreements specifically exclude from the week-end and holiday provisions certain maintenance employees, such as watchmen and firemen, and 1 excludes seasonal employees who work in green leaf tobacco.

PAID VACATIONS AND SICK LEAVE

Annual paid vacations are provided for regular employees under all the cigar agreements. A single vacation period after a qualifying period of service is specified in 4 agreements; the others provide graduated plans with increased allowances for workers with longer service. One of the 4 agreements with the single-period vacation clauses grants 2 weeks' vacation after 1 year of service; the other 3 allow 1 week's vacation after 1 year's service. Five of the 12 agreements with graduated plans provide a maximum of 2 weeks' vacation after 5 years' service and in all except one a minimum of 1 week after a year's service; the exception provides a prorated vacation plan, beginning with 3 days' pay after 6 months' service. The remaining 7 agreements grant a maximum of 1 week after 1 year's service, with smaller allowances for shorter periods of service.

In addition to the service requirements, several agreements specify that the employee to be eligible for the vacation must have actually worked a specified minimum time, such as 1,600 hours or 90 percent of the time worked by the department during the year. A week's vacation pay is generally 40 times the employee's average hourly earnings.

Sick leave.—One agreement which grants a maximum of 2 weeks' vacation grants each employee 6 days' paid sick leave, with the added provision that, 10 days before the agreement terminates, the employee is to receive pay for any unused portion.

SENIORITY RULES

Seniority rules recognizing length of service for preferential consideration in lay-off and rehiring, and occasionally for promotions, are found in all the cigar-manufacturing agreements except that with the Tampa Manufacturers' Association which contains detailed work-sharing provisions to prevent lay-off, if possible. Usually seniority rights do not apply until the completion of a probationary period, varying from 3 weeks to 3 months but generally about 30 days. Almost all the agreements protect the seniority rights of employees who enter the armed forces, generally by providing that an employee honorably discharged shall be reemployed "with all rights and privileges including seniority status," or in a job of "like seniority and status" if he is qualified.

In contrast to the cigarette agreements, in which seniority is usually applied on a plant-wide basis, the majority of the cigar-manufacturing agreements name the department as the unit for the application of seniority. Five agreements specify seniority by job or classification. One agreement provides plant-wide seniority for promotions and in the case of the closing of an entire department, and departmental seniority for other lay-offs.

Lay-offs and rehiring are to be made on the basis of strict seniority in almost all the agreements. Ten agreements have provisions for work sharing by reducing hours to a stated minimum per week, generally 32 or 24, before lay-offs are made. Competence is almost always deemed the determining factor in making promotions, with seniority a secondary consideration applicable when the ability of applicants is about equal.

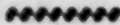
ADJUSTMENT OF DISPUTES

Strikes and lock-outs are banned during the life of the agreement in 10 agreements and until all the steps of the grievance machinery have been exhausted in another. The latter agreement does not provide for arbitration.

Formal machinery for the adjustment of disputes is established in all the agreements, and for their final settlement through arbitration in all except 2. In a majority of agreements initial presentation of a grievance to the management official is made by the union representative, although some provide that an employee may either present the grievance himself or be accompanied or represented by his union steward. Failing satisfaction, agreements usually call for negotiations between the shop committee and higher management officials, 9 of them providing for the assistance of the international union officials in the final steps.

Arbitration.—Two of the agreements containing arbitration machinery name a permanent umpire, but in the others an arbitrator or arbitration board is chosen at the time of the dispute. The most common arrangement is a tripartite board composed of one member chosen by each of the parties and a third member selected by the board itself, although in several agreements the impartial member may be selected by an outside agency in case of a deadlock, and in the Tampa agreement a State or Federal Board of Mediation and Conciliation may be selected.

Discharge.—Although a majority of the agreements indicate that the company may discharge an employee for "just" cause, very few agreements define the reasons for discharge. Four agreements require the company to notify the union in advance before a discharge is made, and in one the employee may be discharged only with the union's consent. The others which mention discharge provide for the appeal of allegedly unjust discharge, and most of them require reinstatement of the employee with back pay if the company loses the case.



Wages and Hours Under Collective Bargaining in Iceland¹

WAGES in Iceland are determined by agreements between employers and labor unions. With the exception of farm labor and some domestic servants, all labor is organized into local labor unions belonging to one of the four following federations:

1. The Federation of Unions of Government and Municipal Employees, representing a combined membership of about 2,000 persons.

¹ Data are from report of A. G. Heltberg, Vice Consul, United States Legation, Reykjavik, April 5, 1945 (No. 19); and from report of Joseph H. Rogatnick, Economic Analyst, United States Legation at Reykjavik May 26, 1945 (No. 32).

2. The Federation of Icelandic Trade Unions, which has in membership 120 organizations including trade-unions, maritime unions, chauffeurs' unions, hospital employees' unions, and others, with 22,000 members. This organization is the most important factor in labor relations in Iceland.

3. The Federation of Unions of Merchant Marine and Fishing Vessel Officers, which includes 20 unions with approximately 2,000 members. Wage contracts contain provisions for employees' life insurance in sums up to 42,000 kronur per employee.

4. The Businessmen's Association of Iceland, which is a union of both employers and employees and includes all employees (except laborers) in business establishments.

The first three federations cooperate on matters pertaining to strikes and general policy. The fourth association has rules permitting collective bargaining within the framework of the organization.

The salary rates and terms for government and municipal employees are governed by law or by State and city regulations. A law designed to regulate and bring salaries up to fair and equal standards was passed by the Althing March 2, 1945, becoming valid April 1, 1945. By this law, government employees are classified into new defined classes, and salary grades are established, in effect, at a level 2.74 times the base pay of 1939, with women receiving the same compensation as men for the same type of work.

Except in a very few cases, all trade-unions have established the 8-hour day or 48-hour week for work on shore. Time and a half is paid for overtime and double time for night and holiday work. Wage agreements also contain provisions for payment of full wages in case of accident or illness, in many cases covering from 7 to 14 days of absence resulting from illness. Factory workers receive pay for 3 months in case of accident or illness caused by their employment. A minimum of 12 days' vacation with pay is provided by law, except for those engaged in the fisheries, who receive a share of the earnings. In some wage agreements provisions are made for longer vacations.

Icelandic labor unions have demanded, and in almost every case have obtained, agreements providing for preference in hiring for union members. Wage agreements usually are effective for 6 to 12 months, with provisions for automatic extension and for notice of termination. There are no child-labor laws in Iceland and children as young as 13 years of age can be accepted as members of unions.

To meet the increased cost of living, the workers in 1940 demanded a new basis for computing wages. It became generally accepted that employees should receive, in addition to their regular wages, a wage bonus commensurate with the increase in living expenses. Wage agreements between employers and labor unions now specify the basic wages to be paid the workers and also provide for a bonus equal to the percent of increase in the official cost-of-living index for the preceding month. A worker earning a basic salary of 500 kronur a month would, for example, for the month of March 1945, receive 1,370 kronur, since the cost-of-living index for February 1945 was 274 (January-March 1939=100).

Strikes and Lock-outs

Strikes and Lock-outs in July 1945

PRELIMINARY estimates indicate 500 work stoppages in July 1945, involving 290,000 workers and 1,500,000 man-days of idleness. The time idle was estimated to equal about 0.21 percent of the available working time.

Strikes and Lock-outs in July 1945, with Comparable Figures for Earlier Periods

Month	Strikes and lock-outs beginning in month		Man-days idle in month	
	Number	Workers involved	Number	Percent of available working time
July 1945 ¹	500	290,000	1,500,000	0.21
June 1945 ¹	485	292,000	1,725,000	.23
July 1944	469	171,529	652,382	.08
July 1943	369	121,298	695,458	.09
July 1942	388	99,676	416,741	.06
July 1941	439	142,969	1,325,758	.20

¹ Preliminary estimates.

The largest stoppages of the month were in the rubber and aircraft manufacturing industries. Contributing substantially to the strike idleness also were three stoppages in shipyards, the strike of newspaper-delivery workers in New York City, the stoppage at the Spicer Manufacturing Co. in Toledo, Ohio, and one in the cigar-manufacturing industry at Tampa, Fla.

Rubber-Industry Stoppages

United States Rubber Co., Detroit.—A stoppage involving over 5,000 workers occurred at the United States Rubber Co. in Detroit on July 13 and continued until July 30, when the Army assumed operation of the plant under Presidential order. The immediate cause of the stoppage was the dismissal, in accordance with provisions in the agreement, of 12 men who had been expelled from the United Rubber Workers of America (CIO) for refusal to pay a strike fine. These men were reported to be members of the Mechanics Educational Society of America (unaffiliated) which had lost a National Labor Relations Board election to the Rubber Workers; its petition for certification had been refused by the National Labor Relations Board in June on the ground that a valid contract with the Rubber Workers was still in effect.

The 12 dismissed men, who started a picket line on the night of June 13, gained the support of other workers, believed to be members of the MESA. By July 18 production had practically ceased and more than 5,000 workers were idle, members of both groups being unwilling to cross the picket line.

Efforts of union and Government officials to settle the dispute proved fruitless. After the company obtained an injunction against picketing, the employees began returning to work on July 23, but in such small numbers that full production could not be resumed. Although the remaining strikers voted to return on July 30, less than a normal day crew reported for work. At 4 p. m. the Army took over, and full production of military tires was resumed the next day. No change occurred, under Army operation, in the status of the 12 dismissed members.

Firestone Tire & Rubber Co., Akron.—A stoppage which involved over 17,000 workers closed down seven plants of the Firestone Tire & Rubber Co. in Akron during the first 2 weeks of July 1945.

The dispute arose when the company's contract with the United Rubber Workers (CIO) expired and negotiations for a new contract were under way. The stoppage followed a strike vote conducted by the National Labor Relations Board June 18, in which the workers voted 8,995 to 1,626 in favor of a strike. A number of issues concerning new wage rates, schedules, and methods of computing wage rates remained unsettled. The international vice president of the union tried unsuccessfully to persuade the local union members to continue negotiations 15 days longer.

At a membership meeting on July 1, the workers voted against accepting company proposals, and immediately after the meeting picket lines formed at the plants. On the following morning the U. S. Conciliation Service certified the dispute to the National War Labor Board. On July 3 the Board ordered the strikers to return to work at once, but the president of the local union replied that they would not return under existing conditions. He also joined the president of the local union at the Goodyear Tire & Rubber Co. plant, where a strike of 20,000 workers which began on June 16 was still in progress, in an appeal to the Senate War Investigating Committee to investigate the labor situation at these companies.

On July 6 the National War Labor Board ordered the Firestone strikers to return to work by July 9, or appear at a hearing on July 10, to show cause not only why the strike had not ended but also why the maintenance-of-membership provisions, previously granted by the Board, should not be suspended. The hearing was held, but the union officials failed to obtain a guaranty from the Board of prompt action on grievances, the Board stating it would not show preference in handling grievances to a union that violated the no-strike pledge. At the hearing the union leaders charged the company with reducing wage rates in violation of the Wage Stabilization Act and with taking advantage of the restraints placed on labor by the no-strike pledge.

On July 12 the War Labor Board ordered the strikers to return to work by July 16 or lose the benefits the Board previously had voted them. On July 14 the striking workers voted to comply with the Board's order and return to work on July 16, with the understanding that contract negotiations were to be resumed on that date. They returned to work as agreed and production soon became virtually normal, with attendance higher than usual after the 2-week strike.

Aircraft Stoppages

Wright Aeronautical Corp., Paterson, N. J., area.—Five plants of the Wright Aeronautical Corp. in the Paterson area were substantially idle and nearly 24,000 workers were involved in a stoppage during the latter part of July. The stoppage of a few hundred workers began July 20 because of the discharge of a union steward. Attempts to settle the dispute were hampered by delayed negotiations on a new contract and by alleged factional complications within the union. After an appeal to the workers by Acting Secretary of War Patterson, who warned that the stoppage would interfere with B-29 attacks on Japan, the workers unanimously voted at a meeting on July 26 to end the strike and to settle the grievance by contract procedure. Work was resumed July 27.

Dodge Chicago Plant of Chrysler Corp.—At the Dodge Chicago plant of the Chrysler Corp. about 9,000 workers struck on July 25 and about 19,000 were idle the next day, allegedly because the company would not allow pay for 15 minutes of clean-up time each day. Union members (United Automobile Workers, CIO) charged that the company had violated verbal agreements, discriminated against union leaders, and delayed settlement of grievances over a period of 2½ years. The company claimed that factionalism within the union and a drive for membership and collection of dues were the underlying causes of the stoppage. Local and international union officers and Government officials urged an immediate end of the stoppage, because of its interference with vitally needed war materials. After 3 days of idleness the workers agreed to return to work on Monday, July 30. However, the union announced that it would ask the National Labor Relations Board to conduct a strike vote under the War Labor Disputes Act unless all grievances were settled promptly.

Shipbuilding Stoppages

Gulf Shipbuilding Corp., Chickasaw, Ala.—Over 800 members of craft unions comprising the Metal Trades Council (AFL), struck on July 3, charging that the Gulf Shipbuilding Corp. had ignored article 4 of the agreement, which stipulates that union members shall be given preference in employment. By July 5, nearly 5,500 workers were idle. A continuous union meeting was held on July 5, and through the efforts of a U. S. Commissioner of Conciliation, the stoppage was ended that night. Work was resumed on July 6. Future meetings between officials of the company and the union were arranged for the purpose of negotiating a settlement.

Southeastern Shipbuilding Co. Savannah, Ga.—Charging that the Southeastern Shipbuilding Co. had failed to follow through and apply for War Labor Board approval of a negotiated wage increase, about 400 machinists, members of the International Association of Machinists (AFL), stopped work on July 20. On July 23, the company closed the shipyard, making nearly 6,500 workers idle. In accordance with an order of the War Labor Board, a large number of workers returned about July 27, but electrical workers and machinists failed to report, the former demanding pay for the time lost. The War Labor Board scheduled a show-cause hearing for August 3, in case production

was not resumed by August 2. All workers returned on August 2 and a settlement was to be worked out by the War Labor Board.

Pennsylvania Shipyards, Inc., Beaumont, Tex.—Nearly 6,500 workers, members of craft unions comprising the Metal Trades Council (AFL), stopped work at the Pennsylvania Shipyards, Inc., on July 16, because of dissatisfaction with contract-renewal negotiations, particularly with respect to their demand for a union shop. All workers were back at work on July 19, and the issues were to be settled by negotiation, with the aid of a U. S. Commissioner of Conciliation.

Newspaper and Publishing Stoppages

Publishers Association of New York City.—Distribution of 11 major newspapers, members of the Publishers Association, was halted for 17 days when members of the Newspapers and Mail Deliverers Union, unaffiliated, stopped work as the collective agreement expired at midnight on June 30. The stoppage was preceded by a vote under the War Labor Disputes Act—1,648 votes in favor of a stoppage, 41 against.

Negotiations for a new contract had broken down principally because of the union's demand that employers pay a sum equal to 3 percent of the delivery workers' pay roll into a union welfare fund. Other issues, on most of which the publishers had made concessions, included wages, vacations, and severance pay, and Sunday and holiday pay. The dispute had been certified to the Daily Newspaper Printing and Publishing Commission of the National War Labor Board on May 30, and on June 14 the Board had ordered the old contract extended, pending settlement. The strike vote was taken June 29, nevertheless, and July 1 found the stoppage in effect.

On July 2 the NWLB ordered the men to return to work, or appear at a show-cause hearing in Washington July 4. At the hearing union leaders charged that the association had refused to bargain during the past 3 months, believing that the Board would intervene and refuse the 3-percent levy. The association denied this charge, claiming that the union had blocked negotiations by refusing a demand that it relax membership requirements sufficiently to supply an adequate number of workers to care for all deliveries without resorting to overtime.

When subsequent orders were ignored and the union on July 8 voted to continue the strike until a contract was signed, the Board suspended the closed-shop provisions of the contract as extended in its interim order of June 14, as well as a retroactive wage adjustment guaranty made in the same order. On July 12 the Board rescinded the entire interim order extending the contract. The next day the union offered to resume work if the publishers would agree to arbitrate. With closed-shop restrictions removed, the publishers informed the workers that if they did not return on July 16 they would be automatically discharged.

On July 17, the union voted to return to work at once, after agreement had been reached with the publishers to arbitrate certain issues, including the levy for the welfare fund, and the Newspaper Commission of the NWLB was to take immediate action on all other issues. Most of the workers were back at work late on July 17.

R. R. Donnelley & Sons Co., Chicago.—A long-pending controversy over the open shop resulted in a work stoppage launched by the Printing Pressmen and Assistants Union (AFL) at the Donnelley plant at midnight on June 3. The plant was picketed, and before work was resumed on July 17, the stoppage involved almost 700 workers and caused sympathy boycotts of Donnelley printing jobs by union members employed by several other Chicago companies and by the Cuneo Eastern Press, Inc., in Philadelphia.

Four of the unions involved—the Printing Pressmen and Assistants' Union, the International Association of Machinists, The International Photo Engravers Union, and the Amalgamated Lithographers—had been certified by the National Labor Relations Board on December 26, 1944, as the bargaining agents for their respective units. On January 25, 1945, the National War Labor Board had directed the company to undertake immediate negotiations with the Organization Committee of Chicago Printing Trades (AFL), representing the above and other unions, for agreements covering these units. A plan for handling grievances, pending such agreements, was to be worked out, as well as specified grievance procedure to be followed by bargaining units not recognized or certified.

Negotiations were begun, but broke down over the question of the open shop. On June 8 the National War Labor Board on its own motion assumed jurisdiction over the dispute, in spite of the unions' contentions that the Board lacked jurisdiction because only a small percentage of the company's business was considered to be connected with war work. As the stoppage continued the Board scheduled a show-cause hearing, as a result of which it ordered the men to return to work, without discrimination, and stated that it would take prompt action on the issues in dispute. They returned on July 17.

Other Large Stoppages

Cigar Makers, Tampa, Fla.—About 6,000 cigar makers employed by 11 manufacturers in Tampa were idle during a stoppage which began July 12 when 550 workers walked out at two plants in protest against an alleged roll-back in wages. The employers claimed that the wage cut was the result of OPA regulations providing for the manufacture of an increased proportion of low-priced cigars, on which the piece rates were lower than on higher-priced cigars. Union officials concurred in this opinion.

Manufacturers claimed that the Tampa cigar industry was designed for production of higher-priced cigars, and that skilled hand workers could not be employed on the lower-piece-rate product. The 11 producers had recently been sued for damages by OPA for violating these "weighted ceiling averages."

On July 18, conferences between officials of the OPA, the manufacturers, workers, and the Tampa Chamber of Commerce began in Washington. A settlement was reached on July 26, calling for changes in certain ceiling prices and revision of production quotas for hand-rolled cigars, and was submitted to the Economic Stabilization Director for approval. On July 29 the manufacturers and workers agreed on a basis for return to work, pending final approval of the new agreement, and full production was resumed July 31.

Spicer Manufacturing Corp., Toledo.—On July 5 members of the office and clerical unit, UAW-CIO, at the Spicer Manufacturing Corp. stopped work in protest against the discharge of a member for alleged tardiness. The union charged that the discharged worker's activities in organizing the office and clerical workers was the primary cause of the discharge. Production and maintenance workers, members of the UAW-CIO (the general bargaining agent in the plant), as well as members of the Foremen's Association of America and the Teamsters (AFL) refused to cross the picket line, making 6,500 workers idle.

The office workers had been certified as a separate bargaining unit by the National Labor Relations Board, and a contract covering this group, which had been in negotiation for about a year, was pending before the National War Labor Board. On July 9 when the NWLB ordered a return to work, union officials called attention to the lack of a contract for office workers, and hence to lack of grievance procedures for settling such disputes. Delay of the Board in approving the contract, as well as delay in acting on an appeal made on time-study rates, was cited by UAW officials as causes contributing to the strike and to the workers' reluctance to return to work. On July 12 the workers voted to remain out.

On Friday, July 13, the Regional War Labor Board ordered the union officials to appear and show cause why the previous back-to-work order had been ignored. Another union meeting was called for the following evening, which resulted in a vote to return to work on Monday, July 16. The discharged employee was reinstated on July 17, pending negotiations with the War Labor Board on the contract for office workers. When the contract is completed the discharge will be processed in line with the contract procedure

Activities of U. S. Conciliation Service, June 1945, and Year 1944-45

DURING the month of June 1945, the U. S. Conciliation Service disposed of 2,363 situations as compared with 2,270 situations in May. The corresponding figure for June 1944 was 2,530.

Of the 319 strikes and lock-outs handled, 275 were settled successfully; 44 cases were certified to the National War Labor Board in which strikes occurred during negotiations, but in 25 cases a Commissioner of Conciliation had effected a return-to-work agreement prior to certification of the case. The records indicate that 231 situations were threatened strikes and 1,494 were controversies in which the employer, employees, or other interested parties asked for the assignment of a conciliator to assist in the adjustment of disputes. During the month 466 disputes were certified to the National War Labor Board. The remaining 319 situations included 113 arbitrations, 18 technical services, 52 investigations, and 136 requests for information, consultations, and special services.

TABLE 1.—*Cases Closed by U. S. Conciliation Service in June 1945, by Type of Situation and Method of Handling*

Method of handling	Total	Strikes and lock-outs	Threatened strikes	Controversies	Other situations
All methods.....	2,363	319	231	1,494	319
Settled by conciliation.....	1,578	275	202	1,101	
Certified to National War Labor Board.....	¹ 466	44	29	393	
Decisions rendered in arbitration.....	113				113
Technical services completed.....	18				18
Investigations, special services.....	188				188

¹ Of these, 25 were settled prior to referral.

Year 1944-45

During the fiscal year 1944-45, the Conciliation Service disposed of 25,907 situations, as compared with 24,797 situations in 1943-44. This was an increase of 4.2 percent.

A successful settlement was reached in 2,827 of the 3,207 strikes and lock-outs handled in 1944-45. Cases that were certified to the National War Labor Board in which strikes occurred during negotiations numbered 380, but in 219 of these a Commissioner of Conciliation had effected a return-to-work agreement prior to certification; threatened strikes numbered 2,183. There were also 17,731 controversies in which the services of a conciliator were requested. During the year 5,509 disputes were certified to the National War Labor Board. The remaining 2,786 situations included 1,151 arbitrations, 166 technical services, 322 investigations, and 1,147 requests for information, consultations, and special services.

TABLE 2.—*Cases Closed by U. S. Conciliation Service During Fiscal Year 1944-45, by Type of Situation and Method of Handling*

Method of handling	Total	Strikes and lock-outs	Threatened strikes	Controversies	Other situations
All methods.....	25,907	3,207	2,183	17,731	2,786
Settled by conciliation.....	17,612	2,827	1,931	12,854	
Certified to National War Labor Board.....	¹ 5,509	380	252	4,877	
Decisions rendered in arbitration.....	1,151				1,151
Technical services completed.....	166				166
Investigations, special services.....	1,469				1,469

¹ Of these, 219 were settled prior to referral.



Industrial Disputes in Ireland, 1941-44¹

THE 84 stoppages of work in Ireland during 1944 involved 104 establishments, 4,387 workers, and 38,308 man-days of idleness. This number of disputes was the highest of the 4-year period 1941-44, but the number of workers involved and the man-days of idleness were lower in 1944 than in any of the 3 preceding years. Establishments affected numbered the same as in 1942—lower than both the

¹ Data are from Irish Trade Journal and Statistical Bulletin (Ireland, Department of Industry and Commerce, Dublin), March 1945.

1941 and 1943 figures. Statistics of disputes for 1941-44 are shown in the accompanying table. Only disputes which involved an actual stoppage and which were reported to the Department of Industry and Commerce were included; reports were received from several sources, including local employment offices, trade-unions, employers' associations, and the press. Disputes which lasted less than 1 day or which involved an aggregate loss of less than 10 man-days were excluded, as well as disputes in connection with employment schemes. The principal causes of 1944 stoppages were conditions of employment relating to wages and hiring or dismissal of workers. Sixty-nine of the 82 disputes terminated in 1944 were settled by direct negotiation; conciliation was resorted to in 9 instances, and arbitration only once; 3 disputes ended without successful negotiation.

Industrial Disputes in Ireland, 1941-44

Item	1944	1943	1942	1941
Disputes begun in year.....	84	81	69	71
Disputes in progress during year:				
Establishments affected.....	104	120	104	130
Workers involved.....	4,387	5,921	5,132	4,895
Man-days of idleness.....	38,308	61,809	115,039	77,133

Labor Laws and Decisions

Recent Decisions of Interest to Labor¹

National Labor Relations Act

LOCAL bus company not "in commerce."—The National Labor Relations Board refused to take jurisdiction over a representation dispute involving a local bus company in the Chicago metropolitan area, on the ground that the company service was purely local in character. (*Chicago Motor Coach Co.*, 62 NLRB 109.) The Board distinguished this case from that of the Baltimore Transit Co. by pointing out that in the present case the passengers had other means of transportation. The company served only a small proportion of industrial workers, its routes were parallel with those of Chicago's other major transit systems, and the dispute had only a very remote effect on interstate commerce.

Hiring and firing rights of employer preserved.—In a case in which a union-employer contract contained a clause that an arbitration award could not "arbitrate away any provision" of the contract, the California Court of Appeals held invalid the maintenance-of-membership clause added by the arbitrator.² Although in this particular case the addition of the clause was "innocuous in its effect," under the amendment "the company would not retain the uncontrolled and exclusive right to hire and discharge all of its employees" but would be limited to nonunion employees and union members not in good standing.

Refusal of terms not refusal to bargain.—The New York Supreme Court (Appellate Division) ruled that a refusal by the employer to accept terms which he does not consider proper is not a refusal to bargain under the New York Labor Relations Act.³ There must be an open mind and good faith on the part of both sides for effective collective bargaining, but refusal to accede to certain terms does not necessarily mean "bad faith."

Deputy sheriffs are employees.—According to a decision by the National Labor Relations Board, company guards, who as deputy sheriffs are employees of a subdivision of a State, are nevertheless employees within the coverage of the Wagner Act. (*In re Tampa Shipbuilding Co.*, 62 NLRB 121, June 27, 1945.)

¹ Prepared in the Office of the Solicitor, Department of Labor. The cases covered in this article represent a selection of significant decisions believed to be of special interest. No attempt has been made to reflect all recent judicial and administrative developments in the field of labor law nor to indicate the effect of particular decisions in jurisdictions in which contrary results may be reached, based upon local statutory provisions, the existence of local precedents, or a different approach by the courts to the issue presented.

² *Consolidated Vultee Aircraft Corp. v. United Automobile, Aircraft & Agricultural Implement Workers of America*, C. A. Calif., June 4, 1945.

³ *New York State Labor Relations Board v. Loehmann*, Sup. Ct. N. Y., App. Div., 1st dept., June 27, 1945;

The Board pointed out that even though the guards are employees of the sheriff by statutory provision, the statute also provides that a company hiring such guards may exercise control over them.

Employer's anti-union talk within protection accorded free speech.—An employer has a right to make a pre-election speech giving his views against unions, provided he does nothing more to interfere with organizational activities or to discriminate against any union members.⁴ Such anti-union statements, followed by assurance that no reprisals would be made for union activities, fall within the protection of free speech under the decision of the Board in *National Labor Relations Board v. American Tube Bending Co.* (134 Fed. (2d) 993).

Unfair application of no-posting rule is discrimination.—A no-posting rule is a legitimate act on the part of an employer.⁵ However, the National Labor Relations Board held that, when a company permits workers to put up clippings, "pin-up" girls, photographs, and other things unrelated to work and then enforces the no-posting rule when an employee puts a union notice on his tool box, such action is discrimination under the terms of the National Labor Relations Act.

Segregation because of color held not discriminatory.—In a case in which an employer contended that no question concerning representation had arisen, because the petitioning unions engaged in "illegal and discriminatory segregation of employees," the National Labor Relations Board held⁶ that segregation because of color did not violate the fifth amendment to the Constitution. As long as the colored auxiliary locals are represented by the parent labor organization, such segregation is permissible. However, said the Board, if it were later shown that equal representation had been denied to any member of the union because of race, creed, or color, the union's certification as bargaining agent would be rescinded.

Lawful strike without notice legal.—The National Labor Relations Board in upholding a strike, even though notice had not been given as required by the War Labor Disputes Act, defended its decision on the ground that the legislative sponsors of that act asserted that no rights guaranteed under the National Labor Relations Act were to be abridged. (*Republic Steel Corp.*, 62 NLRB—, Case No. 8-C-1569, June 30, 1945.) Thus the strikers may not be denied reinstatement, even though no notice is given, nor will they lose any of the other rights under the Wagner Act. The Board, however, on the facts in the case upheld as justified the employer's action in replacing three of the strikers and refusing to reinstate them on termination of the strike.

Employer liable for anti-union acts of employees.—In the case of *In re Brown Garment Mfg. Co.* (62 NLRB—, Case No. 15-C-981, June 25, 1945), the National Labor Relations Board ruled that, when an employer does nothing to stop anti-union activities or to prevent his employees from excluding rival union employees, he is contributing support to anti-union activities and is thus guilty of interference and discrimination. Lack of interference in such cases, said the Board, is tacit approval of anti-union conduct, even though the employer is guilty of no other unfair labor practice.

⁴ *In re Oval Wood Dish Corp.*, 62 NLRB 143, June 4, 1945.

⁵ *In re Carl L. Norden, Inc., & United Electrical, Radio & Machine Workers of America, Local 476*, 62 NLRB 106.

⁶ *In re Atlanta Oak Flooring Co.*, 62 NLRB—, Case No. 10-R-1464, June 28, 1945.

New owner presumed to accept certified union.—When a new owner takes over a plant and undertakes the completion of unfilled orders and contracts of the former owner, retaining the same employees in their same jobs, there is a presumption that the union continues to represent a majority of the certified bargaining unit. (*Synco Machine Co., Inc.*, 62 NLRB 126, Case No. 4-C-1437, June 29, 1945.) Failure of the new owner to deal with the union is a refusal to bargain, in violation of the National Labor Relations Act.

The Board pointed out that though the company was not required to retain employees unqualified for proposed new work, its failure to submit any kind of counterproposal to the union and its absolute refusal to recognize or negotiate with the union made any kind of peaceful settlement impossible.

However, continued the Board, since there was no evidence as to how many of the union employees would be capable of doing the new work, it was not necessary to order the company to bargain with the union at that particular time.

Fair Labor Standards Act

Operating engineers "executives."—In an action to enjoin violation of the Fair Labor Standards Act, the District Court for the Northern District of Ohio in denying the injunction, ruled that operating engineers who manned a power plant in successive shifts were executives as distinguished from employees. Their primary duty was management of the power plant, which required discretionary powers, their salary basis was not less than \$30 per week, and they exercised control either directly or indirectly over the boiler stokers. The court also ruled that the assistant paymaster was an executive, meeting all the requirements of the act for exemption. (*Walling v. General Industries Co.*, 60 Fed. Supp. 549.)

Construction of military camp not "in commerce."—Under the Fair Labor Standards Act, the New York Supreme Court held that employees engaged in constructing a military camp were not engaged in commerce or in the production of goods for commerce. (*Cohen v. Cauldwell-Wingate Co., Inc.*, 114 N. Y. L. J. 55, July 10, 1945.) Such a camp is for military and not commercial purposes, and it is purely local construction, regardless of the fact that some of the materials used pass through interstate commerce.

No interest allowed on recovery of back wages.—The New York Supreme Court held that, under the Fair Labor Standards Act, an employee recovering liquidated damages is not entitled to interest on the sum recovered. (*Avena v. Metropolitan Ins. Co.*, 55 N. Y. S. (2d) 413.)

"Executive" must meet all requirements of act.—Under the Fair Labor Standards Act, an employee cannot be denied the benefits of the act unless he comes within all of the component parts of the regulations defining exempt employees. Thus, in *Berlin v. Eimer & Amend* (55 N. Y. S. (2d) 498), the New York Supreme Court held that an employee who received less than \$200 a month and, as assistant to an executive, did not perform responsible nonmanual work directly related to management or business policies, was covered by the act.

Claim adjuster for liability insurance company is covered by Fair Labor Standards Act.—A claim adjuster writing liability insurance in

several States, whose duties are to investigate, adjust, and settle claims is covered by the Fair Labor Standards Act. (*Browne v. Utica Mutual Insurance Co.*, N. Y. Sup. Ct., Erie C., Jan. 18, 1945.) The adjuster's claim was for the years 1939 to 1940, and even though it was not until 1944 that the United States Supreme Court decided that the insurance business was within the regulatory power of Congress under the commerce clause, this was not grounds for a dismissal of the suit. An employment contract entered into in good faith, but based on a mistake of law as to coverage under the act, is not a bar to recovery of the amount due.

Contract rate of pay equal to minimum held valid.—An employer changed his method of wage payment from a monthly basis to an hourly basis (11 hours per day, 7 days per week), but fixed the rate per hour for the first 40 at an amount above the statutory minimum and paid time and a half for overtime. In affirming the decision of a lower court, the Third Circuit Court of Appeals held that this arrangement met the requirements of the Fair Labor Standards Act. (*Shepler v. Crucible Fuel Co.*, 140 Fed. (2d) 371 (C. C. A. 3).) At the time of the change to the hourly basis, the employees were told that if they did not agree to an 11-hour day, 7-day week, it would be necessary to take on additional men, which would result in a decrease of overtime pay. Employees preferred to work their established time on the new hourly basis. This, the court held, constituted an agreement and the men, by continuing to work on the new hourly basis, agreed to the new hourly rate by their actions. As long as the rate is equal to or above the statutory minimum, the contract is valid and binding on employer and employee.

Injunction for failure to supply home-work certificates.—The District Court for the Southern District of New York denied an employer's contention that the Wage and Hour Administrator is without power to seek the remedy of injunction to prevent violations of home-work regulations under the Fair Labor Standards Act when the employer has failed to obtain the required home-work certificates.⁷ The court based its ruling on the *Gemsco* case,⁸ saying that the injunction was in the public interest.

Time studies as evidence of violations.—The use of time studies made by the Wage and Hour Administrator's investigators was held to constitute evidence when the studies were made for the purpose of securing a preliminary injunction. (*Walling v. Brooklyn Braid Co., Inc.*, S. D. N. Y., June 20, 1945.) The evidence thus acquired was found sufficient to show not only that the employer was keeping improper records but that he had failed also to pay home workers the minimum wage prescribed for the industry and to obtain home-work certificates.

Dredgers not seamen.—In *Walling v. Great Lakes Dredge & Dock Co.* (149 Fed. (2d) 9), the District Court ruled that men working on a dredge were not seamen under provisions of the Fair Labor Standards Act, as their services on board the dredge had nothing to do with navigation of the dredge for purposes of transportation. The court in its decision was guided by the administrative interpretation of the Administrator as to when employees were seamen.

⁷ *Walling v. Skylark Embroidery Studio, Inc.*, S. D. N. Y., June 11, 1945.

⁸ Discussed in *Monthly Labor Review*, April 1945 (p. 830).

Veterans' Rights

Veteran's right to agency restored.—Under the Soldiers' and Sailors' Civil Relief Act, an automobile manufacturer was compelled to restore an exclusive motor sales agency to a former dealer on his discharge from the Army. (*Stockton v. Ford Motor Co.*, D. Idaho, June 18, 1945.) The district court admitted that under the wording of the act it was doubtful whether or not the contract was covered, but resolved all doubt in favor of the veteran, saying if it was wrong, the law should be amended so as not to mislead veterans into thinking their civil rights were secure. Even though the contract was terminable at will by either party on 60 days' notice, the court ruled that the company's promise to "cooperate" with the dealer while he was in the service was a waiver of the company's right to terminate the contract.

National War Labor Board

Transferred employees retain seniority.—The National War Labor Board ruled that employees transferred to supervisory or other positions not covered by the union contract should retain their seniority while in the new job and that the time spent in such new job was to be added to their seniority status in case of a retransfer.⁹ To be eligible for a transfer, employees must have first worked a minimum of 60 days in a nonsupervisory job.

Union officials were granted "superseniority" in their divisions. In case of a reduction in the number of union employees, because of elimination of districts or zones, those representatives eliminated were to retain their seniority rank in their occupational groups, for purposes of lay-offs, for 6 months or the remainder of their terms of office, whichever was less.

Bill of rights no bar to maintenance-of-membership clause.—The National War Labor Board has ruled that its authority supersedes any State action, whether or not such action is within the State constitution or State laws, and that the recent Florida constitutional amendment, which bars closed shops in that State, does not prevent the Board from ordering a maintenance-of-membership clause.¹⁰ Under the War Labor Disputes Act it is the Board's duty to settle labor disputes affecting the war effort and such disputes must be settled in conformity with Federal statutes which are the supreme law of the land.

Social Security Act

Back-pay award "wages" under Social Security Act.—The Circuit Court of Appeals, in *Mirotko v. Social Security Board* (149 Fed. (2d) 273), held that a back-pay award by an employer in compliance with an NLRB order constitutes "wages" under the Social Security Act, for which the employee is entitled to credit on his old-age and survivors insurance account.

⁹ *Bell Aircraft Corp. v. International Union, United Automobile, Aircraft & Agricultural Implement Workers of America*, N W L B Case No. 111-14630-D, July 6, 1945.

¹⁰ *St. Joe Paper Co.* (Port St. Joe, Florida), NWLB Case No. 111-9090-D, May 14, 1945.

The basis of the court's reasoning was that an employee, ordered reinstated with back pay by the National Labor Relations Board, should not lose rights incident to his employment, and that certainly, as regards rights under the Social Security Act, the employee should not suffer because of his employer's illegal act.



Creation of Ministry of Labor in Turkey

THE creation of a Ministry of Labor in the Turkish Government and the appointment of a Minister of Labor were announced in Ankara on June 8, 1945. The Ministry is to handle labor matters which were heretofore chiefly under the jurisdiction of the Ministry of Health and Social Assistance. According to report, the Labor Minister will work with a skeleton staff for the first 5 or 6 months, planning the functions and organization of the Ministry. After the preliminary studies have been finished, the Labor Ministry will take over gradually the labor functions of the Ministry of Health and Social Assistance.

The Minister of Labor was named by the Prime Minister with the approval of the President, under an enabling article of the Constitution. A law defining the scope and functions of the Ministry was passed on June 22, 1945. According to article 1 of the law, the Ministry is "to regulate matters concerning labor life, to administer them, and to control them."

In his first announcement, the Minister of Labor stated that he wished to ease conditions of living and increase the fruits of labor. It was a principle of Turkish democracy, he said, for the members of all occupations to be considered as one group working for the uplift of the nation. Two measures in keeping with this principle were at that time before the Assembly—the Land Distribution Bill and the Workers Insurance Bill.

The desirability of more efficient handling of labor problems has been stressed in the Turkish press. In referring to the long hours of a worker on a ferry landing on the Bosphorus, one newspaper took the position that if the Government adopted effective measures to enforce the 8-hour day, production would be increased and unemployment reduced. Others emphasized the need for protecting the rights of labor as to wages and better conditions, and the need for enlarged industrial inspection.

¹ Data are from reports of E. L. Packer, Chargé d' Affaires ad interim, United States Embassy, Ankara, June 9 and 11, and July 9, 1945.

Women in Industry

Recommendations on Separation of Women from Wartime Jobs¹

THE Women's Advisory Committee of the War Manpower Commission, at a meeting on February 16, 1944, made certain recommendations with respect to the separation of women from wartime jobs. These recommendations, if followed as policy, would not solve the whole problem of job opportunities, but in the opinion of the committee, would serve to cushion the effects of transition and to help women prepare themselves for other jobs.

At the committee's meeting on March 21, 1945, it voted to resubmit its recommendations to the Chairman of the War Manpower Commission, with the request that every effort be made to implement them. The recommendations proposed—

1. That plans be made for counseling workers to be dismissed, as to the following:

- (a) Possibilities and procedures for transfer to other jobs in the locality.
- (b) Retraining programs in operation in the locality.
- (c) Social security rights (unemployment insurance—old-age pension), and any other Government provision.

2. That notice of cessation of work be given as far in advance as possible.

3. That split-shift workers, including children, for whom part-time working arrangements have been made, be laid off first.

4. That voluntary resignations be called for from those women workers who wish to return to civilian life as soon as possible.

5. That separations of other women workers be based on the following considerations: (a) Skill necessary on the job; (b) seniority on the job; and (c) dismissal pay based on length of service.

Women Employed by Class I Steam Railways, April 1945²

IN APRIL 1945, the number of women employed by all reporting divisions of class I steam railways (excluding switching and terminal companies) was 115,876, or 8.16 percent of the total personnel on such railways. The corresponding figures for the same month in 1944 were 112,063, or 7.94 percent. The number and proportion of women in the major railway occupational groups are given in the accompanying tabulation.

¹ U. S. War Manpower Commission. Women's Advisory Committee. Mineographed report, Washington, March 30, 1945.

² Data are from Statement No. 4517 (mimeographed) of the Bureau of Transport Economics and Statistics of the U. S. Interstate Commerce Commission, Washington, April 1945.

Women Employed and Total Employment, April 1944 and 1945, on Class I Steam Railways

[Excluding switching and terminal companies]

Group	Year	Total workers	Women workers	Percent women
Grand total, all reporting divisions.....	1945	1,420,511	115,876	8.16
	1944	1,412,184	112,063	7.94
Total, all reporting divisions in which females are included.....	1945	1,122,464	115,876	10.32
	1944	1,120,715	112,063	10.00
Executives, officials, and staff assistants.....	1945	14,884	19	.13
	1944	14,521	18	.12
Professional, clerical, and general.....	1945	230,716	80,026	34.68
	1944	227,990	73,769	32.36
Maintenance of way and structures.....	1945	246,497	1,765	.72
	1944	239,323	2,741	1.15
Maintenance of equipment and stores.....	1945	372,776	20,344	5.46
	1944	379,447	23,310	6.14
Transportation (other than train, engine, and yard).....	1945	162,779	13,388	8.22
	1944	161,722	11,908	7.36
Transportation (yard masters, switch tenders, and hostlers).....	1945	3,124	57	1.82
	1944	4,857	53	1.09
Transportation (train and engine).....	1945	91,688	277	.30
	1944	92,855	264	.28

Hours and Night Work of Women in New York War Plants

EVEN in the midst of war the majority of employers included in a New York survey did not find it necessary to employ women workers over 48 hours a week, according to a study made by the State Division of Women, Child Labor, and Minimum Wage for a typical week in 1944.¹ The investigation covered 304 war plants in various parts of the State, employing 232,498 workers; of the 70,273 women factory workers included in this number, 63,089 were in establishments which had been granted dispensation to exceed the legal 48-hour workweek for women; in addition 14,357 women had been permitted to operate on night shifts which extended past 10 p. m.

Of the 290 establishments having permission to employ women workers in excess of 48 hours, 56 did not avail themselves of their dispensations in the middle week of May 1944. Most of these plants had asked for an extension of hours in case of emergency, but only 14 establishments made full use of the maximum hours allowed under the dispensation.

The remaining 220 establishments only partially availed themselves of their dispensations, and most of these utilized less than 25 percent of the permitted extra hours. Many of these plants could meet wartime production requirements on peacetime standard hours, except in the employment of a few key women. Other plants had either overestimated the work schedule needed or discovered that it was in the interest of efficiency to cut down hours below the number requested by the plant and permitted by the industrial commissioner.

¹ New York Department of Labor. Division of Women, Child Labor, and Minimum Wage. Hours and Night Work of Women in War Plants in New York State, 1944 (Albany, January 1945).

Of the 63,089 women who were allowed to work in excess of 48 hours, two-thirds worked at or below the legal standard for peacetime and less than 20 percent worked the full number which the employers had requested.

Actual Hours Worked

Of 70,273 women factory workers in 304 war plants, only 50 percent actually worked from 40 to 48 hours—the usual peacetime workweek. The hours of an additional 20 percent were under 40. On the other hand, 30 percent of the women worked over 48 hours, but the majority of them less than 52 hours.

Workweeks were shortest in New York City, where 50 percent of the women worked less than 46 hours. The longest workweek was found in the metropolitan district outside New York City, where 50 percent of the women had a workweek of 50 hours or over and 42 percent worked at least 52 hours.

Women worked the shortest hours in the essential civilian industries, such as apparel and leather goods. In these two industries, approximately two out of every five women worked less than 40 hours. In general, highest weekly hours were found in the munitions industries. Half of the women engaged in the production of professional and scientific instruments worked over 49.5 hours and 30 percent of the women workers in this industry worked at least 52 hours. At the same time, however, over 35 percent of the women in this industry worked at or below the peacetime standard of 48 hours.

Violations of hours law.—In 109 of the 304 establishments, about 3,000 of the 70,000 women included in the survey were found working illegal hours. Of this number more than 1,600 worked more than the hours allowed by dispensation. The remainder, who were not covered by dispensations or who were employed in establishments in which the dispensation had lapsed, worked in excess of 48 hours in violation of the labor law.

Employers' Experience With Long Work Schedules

Questioned concerning their experience with long weekly hours for women, employers in general agreed that although such hours were often imperative in wartime, normal production demands could be satisfied with 48 hours or less. Thirty-seven executives stated that their hours schedule had already been reduced, and most employers were planning reversion to shorter hours at the earliest possible date.

Numerous employers stated that weekly schedules in excess of 48 hours adversely affected the hourly production rate, the quality of work, regular attendance, turn-over, and the accident rate. Furthermore, nearly 60 percent of the reporting establishments found that absenteeism increased when working hours exceeded 48.

Employers' opinions on the reaction of workers to the long working week were varied and doubtless represented the conflicting feelings of women regarding the extension of the work period. Some employers declared that "women like longer hours for the extra pay." Others reported that "women refuse to work longer hours in spite of the overtime pay." However, it was the consensus of the great majority of employers that women workers are in favor of schedules based on 5 or 5½ days rather than on 6 days a week and that the response of women to patriotic appeals is excellent when production needs are explained and understood.

Employers' Experience With Night Work for Women

In the judgment of an overwhelming majority of the employers questioned, night work is a "necessary evil" in the emergency of war.

About 60 percent of the reporting establishments indicated that the hourly production rate was lower and absenteeism was higher on night shifts than on day work. Furthermore, women were too tired and sleepy to devote their full energies to the job because of their household responsibilities during the day. The quality of work and turn-over were also affected adversely.

Besides the adverse effects on workers' efficiency, employers cited the difficulty of manning night shifts because of workers' reluctance to accept night work, the need for and difficulty of obtaining extra supervision at night, the costly premiums necessary, the absence of transportation facilities, the moral hazards involved for women, and the harmful effects of night work on the health and welfare of the workers.

Although 19 establishments used rotating shifts in order to offset the disadvantages of night work, most of the multiple-shift establishments (99 out of 118) operated on fixed shifts. The great majority of employers who used fixed shifts gave as their reason the workers' unwillingness to take night employment. Skilled operatives were reported as being particularly reluctant to take night assignments.



British Recommendations for Organization of Domestic Employment

THE establishment of a corporation for domestic workers, with the suggested name of National Institute of Houseworkers and organized along the lines of the National Hostels Corporation, was the key recommendation in a report submitted by the British Minister of Labor and National Service to Parliament in June 1945.¹

The following duties were recommended for the institute:

1. (a) The training of civilian women and girls (pending the extension of facilities under the Education Act) in the institute's local centers, subsistence allowances being made to such trainees; and (b) the placement, in approved households of these trainees and of women formerly in the armed services who have taken readjustment courses before being demobilized.

2. Arrangements for advanced training of institute members who desire to do specialized work such as cooking and housekeeping, or who wish to prepare themselves for positions in institutions or in the catering trades.

3. The training of housewives (on a fee basis), especially in the organization of household employment and in the best utilization of such work as the employer is able to pay for.

4. The certification of workers trained in the centers of the institute or whose efficiency record is satisfactory to such centers, the certificates to be endorsed by the institute after a test period on the job.

5. Establishment of hostels, attached to training centers, for day workers in various occupational groups (including domestic employees)

¹ Postwar Organization of Private Domestic Employment, by Violet Markham and Florence Hancock. London, Ministry of Labor and National Service, 1945. (Cmd. 6650.)

and in connection with each a club which will constitute the local headquarters of domestic workers who are members of the institute.

Recommendations were also made for standard wages, to be determined by an independent committee; an indoor uniform; and a "signing-off book" to be used instead of personal references.

The institute's centers would refer, from its members, three types of employees: (a) Resident household workers; (b) regular daily or part-time workers for one household; and (c) 4-hour shift workers who would remain employees of the institute and would be assigned by it to more than one household.

The initial program for the organization of domestic employment calls for the establishment of local centers in 10 or 12 large provincial communities, in addition to centers in 3 good residential districts in London. A special experimental training center would be opened in an agricultural section of the country.

With the exception of the training activities, this institute plan should eventually become self-supporting, through annual subscriptions from householders, charges to the residents of hostels, and subscriptions from nonresident working members using club facilities. Charges for "supply workers" will be higher than wages, in order to cover insurance, holiday pay, and costs of administration.

In cases in which the employer can prove that the services of a domestic worker are a necessity, it is advocated that the employer be allowed to deduct amounts paid out for such service from his income, before the assessment of his income tax.

Recreation

Community Recreation in 1944

WARTIME conditions gave community recreation service great significance in American life in 1944, according to a recent report of the National Recreation Association.¹

Activities of Local Agencies

Leisure-time programs were carried on in 1,426 communities by 1,559 agencies, with the aid of over 83,000 paid and volunteer leaders, at a cost of almost 39 million dollars. These figures represented a gain of a third over the number of communities and agencies which reported for the year 1942.² In addition, more than 350 communities known to have conducted programs under leadership or to have operated facilities which entitled them to inclusion in 1944, failed to submit a report.

Leadership.—Leadership in 1944 reached a peak in numbers and payment for services. Paid leaders increased 35 percent in number—from 26,244 in 1942 to 35,503. Among these were a number who rendered special war recreation service and were paid from Federal funds. Women outnumbered men, and increased in number 46 percent over their 1942 total. Salaries and wages for these services rose 49 percent—from \$10,868,313 in 1942 to \$16,156,590—and in 1944 represented 42 percent of the entire expenditure for community recreation. During the latter year, 4,870 leaders were employed on a full-time year-round basis in 500 cities, compared with 3,630 such leaders in 368 cities 2 years before. Volunteer leadership reached a total of 47,288, a 45-percent increase over 1942. Although the demand for trained recreational leadership on the part of the armed forces and civilian war agencies was reported as beginning to taper off toward the end of 1944, local recreation programs continued to suffer because of the absence of key workers. Increased reliance was placed on young personnel. Training institutes and programs received special emphasis because of the large numbers of new workers, both paid and volunteer.

Playgrounds, indoor centers, and facilities.—Outdoor playgrounds conducted under leadership reached a peak of 10,022 in 1,084 cities in 1944, contrasted with 8,194 playgrounds and 774 cities in 1942. Nearly two-thirds of these playgrounds were operated only during the summer in 1944.

The number of recreation buildings and indoor recreation centers—4,536—represented only a slight increase over the 1942 total, prob-

¹ Recreation (New York) July 1945, yearbook number.

² Recreation, June 1943; no comparable data were published for the year 1943.

ably because of construction difficulties or shortages in leadership, or both. Forty percent of these buildings and centers (1,813) were operated as youth centers or contained special features for young people.

Information on facilities was gathered only for bathing beaches, day camps, golf courses, and swimming pools. There was relatively little extension in these types of facilities in 1944, with the exception of day camps, which, as a rather new type of development, increased in number from 131 in 1942 to 342. Swimming pools registered a gain of 257 during the year. Bathing beaches and 9-hole golf courses were slightly under the 1942 figure.

Agencies providing community recreation.—Municipal or public bodies constituted over four-fifths (1,282) of the 1,559 agencies which carried on programs of recreation in 1944, and private agencies numbered only 277, according to the following table.

*Community-Recreation Agencies, by Type, 1942 and 1944*¹

Type of agency	Number of agencies		Percent of increase	Agencies with full time, year-round leadership		Percent of increase
	1944	1942		1944	1942	
All agencies.....	1,559	1,167	33.6	535	409	30.8
Municipal authorities.....	1,282	1,023	25.3	448	346	29.5
Separate recreation departments.....	474	330	43.6	275	199	38.2
Park departments.....	353	332	6.3	104	90	15.6
School departments.....	191	153	24.8	27	21	28.6
Other authorities.....	264	208	26.9	42	36	16.7
Private agencies.....	277	144	92.3	87	63	38.1

¹ Data are from Recreation (New York), June 1943 and July 1945 (yearbook numbers).

Finances.—A total of about 38½ million dollars was spent for community recreation service in 1944—more than 7 million dollars above the 1942 figure. Outlay for land, buildings, and permanent improvements represented, as in 1942, only a small percentage of the total, being a little over 3½ million dollars in 1944, or less than a million-dollar increase within the 2-year period.

During 1943-44 there was a continued trend toward the increase of local recreation budgets in all parts of the country. Some of the cities reporting substantial increases in 1944, such as San Diego and San Francisco, were cities with an exceptional wartime growth in population or with an extensive program in war housing projects. Others, like Newark, N. J., provided a special program for children, necessitated by wartime conditions.

Local tax funds were again the chief source of financing, although a number of municipalities reported additions from private, Federal, or State funds, or a combination of these. Federal funds were indicated as having been spent in 126 cities, although no separate amounts were given.

*Federal Assistance in Community Recreation*³

The Office of Community War Services of the Federal Security Agency, through its Recreation Division, continued to work with other Federal agencies, States, and communities in helping war areas to provide adequate leisure-time programs for workers and their families, for servicemen, and for young people.

As of June 30, 1944, the Recreation Division had helped to organize more than 1,300 local war recreation committees and 21 such State committees, and its technical experts provided assistance in organization, finance, legislation, and program.

The Recreation Division offered comprehensive specialized assistance to communities and helped them to obtain supplementary funds from the Federal Government and private national organizations when they could not finance their projects adequately.

During the fiscal year, the Division supervised the operation of 2,638 servicemen's recreation centers—1,546 of which were maintained by local communities and 1,092 by the United Service Organization. These centers served the 1,341 Army posts, camps, and stations and the 350 major naval establishments in the continental United States. It also certified to the need for 120 Federal recreation buildings (bringing the total to 421) and for Lanham Act grants and private contributions for the maintenance of these buildings.

The Recreation Division, during the fiscal year, shifted its emphasis from assistance in recreation activities for the armed forces to those for persons in war production areas; it also stressed programs for safeguarding the welfare of children and young people.

The Division reported that it had helped to establish 742 centers and programs for war workers and their families in 435 industrial areas, in 84 of which city recreation departments had been established for the first time.

Separate organizations to deal specifically with the problems of youth were established in 391 communities in 24 States; over 600 teen-age recreation centers and clubs were started and 1,735 new playgrounds and day camp programs opened, according to the latest report of the Office of War Community Services. Many of these developments the Office helped to stimulate.⁴

³ Data are from Annual Report of the Federal Security Agency for the Fiscal Year 1944, Washington, 1945, Section 7 (p. 8).

⁴ For an earlier account of special war recreation services and the activities of other Federal and national agencies, see Monthly Labor Review, August 1943 (p. 235).

Education and Training

Results and Termination of War Training Programs

WITH the close of the European war, measures were taken to end, by June 30, 1945, the intensive training of chemists, engineers, physicists and production supervisors under the Engineering Science and Management War Training program, and the training of war production workers under the Vocational Training program for such workers. Both programs have been operating since 1940 under the direction of the U. S. Office of Education.

Engineering Science and Management War Training

The Engineering Science and Management War Training program, known before the outbreak of the war as Engineering Defense Training and Management Defense Training, was instituted by an act of Congress in October 9, 1940, to cover the "cost of short intensive courses of college grade designed to meet the shortage of engineers in fields essential to the national defense." Later, the program was extended to include chemistry, physics, and production supervision.

The courses under that program have been of college grade, and required as a minimum for admission high-school graduation or equivalent training and experience. Requisites for individual courses ranged from a college degree in engineering to a doctor's degree.

As many as 238 institutions have been participants in the program at one time or another, and these have provided courses not only on their own campuses but wherever neighboring war industries required college-level training in one or more lines for which the institutions had been approved.

Instruction was given in more than 1,000 cities, often in the establishments being served, and classes have been held at any time of day or night that best fitted in with the trainees' hours of work.

By April 30, 1945, over 42,000 classes had been conducted with an enrollment of 1,791,206, including 1,332,570 in engineering, 386,011 in production supervision, 39,392 in chemistry, and 33,233 in physics. Congressional appropriations for this section of the war production training program totaled \$94,500,000.

Much evidence is at hand in the Office of Education, in the form of statements from industrial executives, indicating that this program, by providing specialized training vitally needed in war industry, has greatly expedited war production. It seems likely that without it the record made by American industry during the war would have been impossible.

Vocational Training for War Production Workers

During the 5-year period July 1940–July 1945, vocational war training personnel have conducted at the local State and Federal levels the program of Vocational Training for War Production Workers. This program, like the “regular” program, was based on Federal, State, and local cooperation.

Under this scheme representatives of the U. S. Office of Education kept in close touch with State boards for vocational education, the State boards being responsible for carrying on the program within their respective jurisdictions.

Because of the urgent demand for war workers the trainees were placed on jobs as soon as they were “reasonably efficient.” Training objectives were restricted to job units which could be learned in a relatively brief period.

It was estimated that by June 30, 1945, nearly 7,500,000 persons would have had some kind of training under this program for war production workers in 2,600 training centers. The appropriations made available for this work totaled \$326,900,000.

From July 1, 1940, to the close of March 1945, the actual number of persons who received training in these courses reached 7,369,017, of whom 2,662,558 were registered for preemployment courses and 4,706,459 for supplementary courses (table 1).

TABLE 1.—Enrollment in Preemployment and Supplementary Courses, by Type of Course, July 1, 1940, to March 31, 1945

Type of course	Enrollment		
	Total	Preemployment courses	Supplementary courses
All courses.....	7,369,017	2,662,558	4,706,459
Automotive services.....	167,661	70,468	97,193
Aviation services.....	1,797,830	655,619	1,142,211
Electrical services ¹	117,645	55,989	61,656
Forging ¹	11,490	7,801	3,689
Foundry.....	32,298	19,252	13,046
Machine shop ¹	1,214,335	763,298	451,037
Radio services ¹	251,613	82,784	168,829
Sheet-metal work ¹	98,533	74,163	24,370
Shipbuilding.....	1,389,609	436,519	953,090
Welding ¹	514,149	287,095	227,054
Other.....	1,773,854	209,570	1,564,284
Women.....	1,474,479	554,422	920,057
Negroes.....	363,032	211,437	151,595
Veterans of World War II ²	16,861	2,735	14,126

¹ Does not include enrollments in courses specifically for aviation and shipbuilding. These are included in the aviation and shipbuilding totals.

² Cumulative from Jan. 1, 1944.

It will be noted from table 2 that the persons enrolled in this program in California, Illinois, Michigan, New York, Ohio, Pennsylvania, and Washington State constituted over half of the total number of trainees.

TABLE 2.—*Enrollment in Preemployment and Supplementary Courses, by State or Territory, July 1, 1940, to March 31, 1945*

State or Territory	Enrollment			State or Territory	Enrollment		
	Total	Preemployment courses	Supplementary courses		Total	Preemployment courses	Supplementary courses
All States.....	7,369,017	2,662,558	4,706,459	Montana.....	8,253	6,181	2,072
Alabama.....	123,796	39,087	84,709	Nebraska.....	16,830	11,173	5,657
Arizona.....	40,586	11,851	28,735	Nevada.....	1,879	624	1,255
Arkansas.....	24,676	16,595	8,081	New Hampshire.....	18,627	9,085	9,542
California.....	897,529	296,009	601,520	New Jersey.....	207,164	68,971	138,193
Colorado.....	64,296	26,803	37,493	New Mexico.....	18,293	8,830	9,463
Connecticut.....	106,599	26,216	80,383	New York.....	749,138	328,471	420,667
Delaware.....	35,687	3,742	31,945	North Carolina.....	47,459	30,855	16,604
District of Columbia.....	17,783	10,050	7,733	North Dakota.....	4,508	2,975	1,533
Florida.....	135,544	46,094	89,450	Ohio.....	432,634	133,518	299,116
Georgia.....	110,081	35,848	74,233	Oklahoma.....	117,460	43,963	73,497
Hawaii.....	28,368	1,693	26,675	Oregon.....	261,821	79,562	182,259
Idaho.....	15,175	9,586	5,589	Pennsylvania.....	638,009	247,863	390,146
Illinois.....	376,484	114,091	262,393	Puerto Rico.....	23,543	13,667	9,876
Indiana.....	236,376	76,511	159,865	Rhode Island.....	58,100	12,653	45,447
Iowa.....	41,042	16,961	24,081	South Carolina.....	45,041	21,933	23,108
Kansas.....	110,734	32,640	78,094	South Dakota.....	8,262	6,524	1,738
Kentucky.....	85,278	40,911	44,367	Tennessee.....	97,640	54,071	43,569
Louisiana.....	77,962	38,399	39,563	Texas.....	253,956	111,591	142,365
Maine.....	47,178	15,198	31,980	Utah.....	69,524	19,596	49,928
Maryland.....	152,070	56,456	95,614	Vermont.....	12,075	5,284	6,791
Massachusetts.....	160,109	62,111	97,998	Virginia.....	98,602	32,228	66,374
Michigan.....	372,880	132,315	240,565	Washington.....	371,741	55,629	316,112
Minnesota.....	100,344	43,516	56,828	West Virginia.....	71,832	47,219	24,613
Mississippi.....	78,460	27,475	50,985	Wisconsin.....	145,223	66,585	78,638
Missouri.....	135,937	57,999	77,938	Wyoming.....	16,429	5,350	11,079

Federally Aided Vocational Programs, 1934-44¹

TOTAL enrollment in all types of vocational-education schools, exclusive of war programs and classes conducted under Federal grants, numbered 2,001,136 in 1943-44, as compared with 2,281,743 in the previous fiscal year—a decline of 280,607. Classified by type of program, enrollment for 1943-44 was distributed as follows: Agriculture, 469,959; distributive education (for retail stores, etc.), 181,509; home economics, 806,515; and trade and industrial education, 543,153.

For the fiscal year 1944 the expenditures of Federal, State, and local funds for vocational education—salaries of teachers, teacher trainers, supervisors, and directors of vocational education—totaled \$64,299,132.59, of which \$19,958,548.95 came from the Federal Government and \$44,340,583.64 from State and local governments.

The accompanying table gives the enrollments in vocational schools and classes from 1934 through 1944, the peak enrollment for these years being 2,624,786 in 1942.

¹ Data are from Digest of Annual Reports of State Boards for Vocational Education to the U. S. Office of Education, Vocational Division, Fiscal Year Ended June 30, 1944 (Washington, 1945).

Enrollment in Federally Aided Vocational Classes, by Type of Program, 1934-44

Year	Total number enrolled	Enrollment by type of program			
		Agriculture	Trade and industry	Home economics	Distributive education
1944 ¹	2,001,136	469,959	543,153	806,515	181,509
1943	2,281,743	491,967	618,471	873,771	297,534
1942	2,624,786	605,099	850,597	954,041	215,049
1941	2,429,054	596,033	804,515	871,891	156,615
1940	2,290,741	584,133	758,409	818,766	129,433
1939	2,083,757	538,586	715,239	741,503	88,429
1938	1,810,082	460,876	685,804	627,394	36,008
1937	1,344,728	386,302	580,990	377,436	-----
1936	1,255,861	343,809	537,151	374,901	-----
1935	1,178,896	325,685	503,865	349,346	-----
1934	1,051,000	286,150	466,999	297,851	-----

¹ Provisional figures, subject to final audit of State reports.

Postwar Resumption of Apprenticeship in Great Britain¹

A POSTWAR plan for the resumption of apprenticeship interrupted by war service was put into effect in Great Britain on April 12, 1945, in accordance with a current announcement made by the Minister of Labor and National Service in the House of Commons. The Government proposal had been previously announced by the Minister in the House on September 28, 1944.² By its terms men and women in Great Britain who were apprentices when they joined the military forces or when diverted to other work during the war are to receive time allowances, on resuming training, for the periods spent in war services and are to be paid at increasing rates to a maximum of eleven-twelfths of the appropriate journeyman's rate during the final stages of training. In general, the skill of the persons returning for training is expected to be that of apprentices. Greater maturity on their part is insufficient to compensate employers for paying the apprentices sufficient wages to attract them back to their former trades. Therefore, the State has undertaken to grant a wage allowance for such trainees.

National joint industrial councils, trade boards, and other appropriate bodies were to be requested by the Minister of Labor to prepare plans jointly with his department for adoption in their respective industry or trade. If no joint body exists the Minister may provide a scheme. To become effective, a scheme must have the Minister's approval and conform to the following standards: (1) The occupational coverage and training are to be defined; (2) administrative arrangements must be specified; (3) provisions for settling disputes in connection with the scheme are to be laid down; and (4) a form of employer-employee agreement is to be entered. The Minister may enforce proper observance of the plan without legislation and may suspend or discontinue allowances wherever that seems necessary.

¹ Data are from Great Britain, Parliament, House of Commons, Debates, September 28, 1944 (column 302), and April 12, 1945 (column 1956); and Ministry of Labor Gazette, October 1944 and May 1945.

² The position of apprentices in relation to military training and national service has been the subject of special arrangements since the beginning of the war. For a brief history of the legislation involved, see Apprenticeship Interrupted by War Services, prepared by the Ministry of Labor and National Service (Ministry of Information, 1945, Reference Booklet No. 3).

Coverage

In addition to members of the armed forces and related service, coverage extends to other work of national importance, including industrial work, provided those employed were under arrangements made or approved by the Minister of Labor and National Service. Occupational coverage is for work in which, before the war, persons were required to undergo training for a fixed period of at least 3 years to become journeymen or skilled workers.

Time Allowance for War Service

Under the scheme, an apprentice who was in his last year of training before entering war service is classed as a journeyman on returning to his former occupation. For others, the unexpired apprenticeship term is to be reduced by a third of the period of war service, up to a third of the unexpired period of the original length of the apprenticeship term. Any time served by the apprentice in his trade or in comparable work during war service is to be counted as part of his apprenticeship.

Allowances and Wages

The British Government has assumed responsibility for wage allowances to be paid to apprentices receiving training after the date when the original apprenticeship would have ended or at the age of 21 (23 in certain cases in Scotland), whichever is earlier, at the rate of a third of the journeyman's rate, including war bonus, for the trade in the district concerned. Other Government payments consist of maintenance allowances to apprentices receiving training in a technical institution or training center and a fee allowance to cover the cost of either of the foregoing types of training. The maximum period during which these allowances are payable is 104 weeks.

Government wage allowances form a part of the apprentice's total pay and are disbursed by the employer, who is then reimbursed by the Minister of Labor and National Service. Total wages up to the date the apprentice would normally have ended the original term of apprenticeship or have reached the age of 21 years (23 years in Scotland), whichever is earlier, consist of the pay (including war bonus) in that trade and district for apprentices in that year of training which the apprentice would have reached if his term had not been interrupted by war service. Subsequently he is entitled to not less than ten-twelfths of the journeyman's rate (including war bonus) for the first half of the remaining training period and eleven-twelfths for the second half.

Technical Training

During full-time technical training the apprentice receives a Government allowance at the same rate as is fixed for industrial training of new entrants. Part-time trainees likewise qualify for wages allowance. Periods spent in a technical institution or training center for the purpose of renewing apprenticeship count in calculating the amount of wages to which the apprentice is entitled.

Wage and Hour Statistics

Trends in Urban Wage Rates, October 1944 to April 1945¹

BASIC wage rates, as measured by the Bureau of Labor Statistics index of urban wage rates, continued to rise between October 1944 and April 1945, but a leveling off of the upward trend was observed in both manufacturing and nonmanufacturing industry. The greatest increase occurred principally in the lower-paid industries, where advances beyond the limits of the "Little Steel" formula are permitted by War Labor Board policy with respect to "substandard" wages, and in those piece-rate industries characterized by frequent changes in piece rates owing to changes in job content. The Southeastern and Middle Atlantic States registered the largest increases throughout industry in general. Wage rates declined in a few areas.

The Bureau's index is affected by changes in basic wage rates resulting from general changes in pay scales and by individual wage-rate adjustments within occupational classifications. It excludes the effect of such factors as premium pay for overtime and late-shift work, the shifting of employment among regions, industries, and occupations, and most of the changes in the composition of the labor force. The index covers manufacturing industry and selected branches of nonmanufacturing in urban areas.

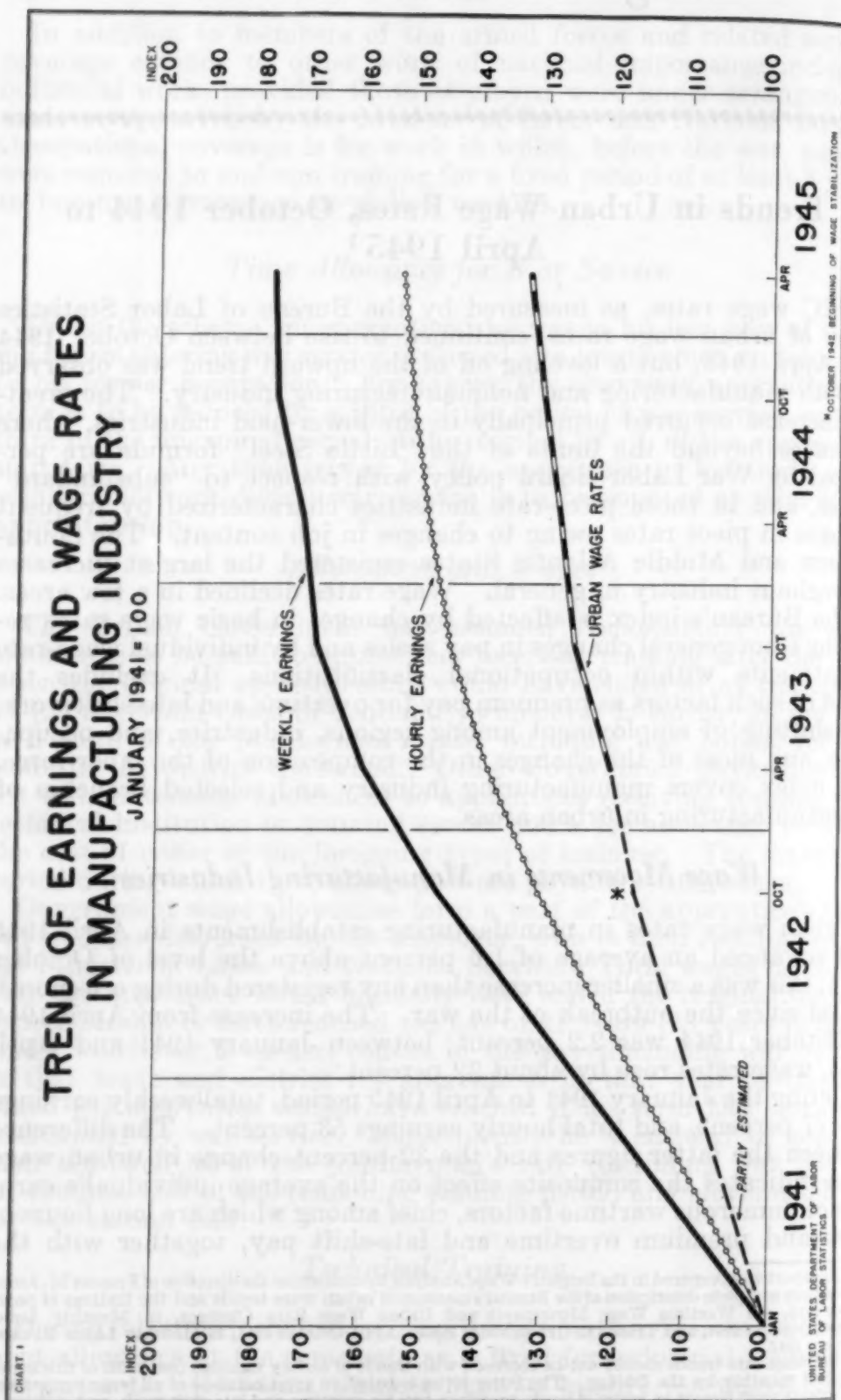
Wage Movements in Manufacturing Industries

Urban wage rates in manufacturing establishments in April 1945 had advanced an average of 1.6 percent above the level of October 1944; this was a smaller increase than any registered during a 6-month period since the outbreak of the war. The increase from April 1944 to October 1944 was 2.2 percent; between January 1941 and April 1945, wage rates rose by about 32 percent.

During the January 1941 to April 1945 period, total weekly earnings rose 77 percent, and total hourly earnings 53 percent. The difference between the latter figures and the 32-percent change in urban wage rates indicates the composite effect on the average individual's earnings of numerous wartime factors, chief among which are long hours of work and premium overtime and late-shift pay, together with the

¹ This report was prepared in the Bureau's Wage Analysis Branch under the direction of Frances M. Jones. For a more complete description of the Bureau's measure of urban wage trends and the findings of previous surveys, see *Wartime Wage Movements and Urban Wage Rate Changes*, in *Monthly Labor Review*, October 1944, and *Trends in Urban Wage Rates, April-October 1944*, in *Monthly Labor Review*, February 1945.

Urban wage-rate trends should not be confused with trends of factory earnings (see p. 531 of this issue), published monthly by the Bureau. The latter series is based on gross earnings of all wage earners and thus reflects such factors as hours of work, premium pay for overtime and late-shift work, and shifting of employment among regions, industries, and occupations. The estimated straight-time average hourly earnings are computed by applying a correction factor to gross average earnings.



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shifting of employment from lower-wage consumer industries to war industries. It is noteworthy that both gross weekly earnings and gross hourly earnings showed somewhat lower rates of increase than wage rates. "Adjusted" hourly earnings, which are gross hourly earnings corrected for premium overtime payments and interindustry employment shifts, continued to show a higher rate of increase than did urban wage rates. A comparison of the measurements of wage movements is shown in table 1 and chart 1.

TABLE 1.—Comparative Summary of Changes in Earnings and Wage Rates in Manufacturing, January 1941 to April 1945

Period	Number of months	Percent of increase in specified period				Percent of increase per month ²			
		Gross weekly earnings	Gross hourly earnings	Adjusted hourly earnings ¹	Urban wage rates	Gross weekly earnings	Gross hourly earnings	Adjusted hourly earnings ¹	Urban wage rates
Total period (January 1941–April 1945).....	51	77.0	53.0	38.7	³ 32.4	1.1	0.8	0.6	³ 0.6
Prestabilization period (January 1941–October 1942).....	21	46.0	30.7	20.7	³ 17.0	1.8	1.3	.9	³ .8
Stabilization period (October 1942–April 1945).....	30	21.3	17.0	15.0	³ 13.2	.6	.5	.5	³ .4
October 1942–April 1943.....	6	9.2	5.7	3.3	³ 3.0	1.5	.9	.5	³ .5
April 1943–October 1943.....	6	5.6	4.7	3.5	3.8	.9	.8	.6	.6
October 1943–April 1944.....	6	⁴ 1.5	⁴ 2.5	3.1	1.9	⁴ .2	.4	.5	.3
April 1944–October 1944.....	6	3.0	⁴ 1.8	2.3	2.2	.5	.3	.4	.4
October 1944–April 1945.....	6	.5	1.4	2.0	1.6	.1	.2	.3	.3

¹ Hourly earnings excluding premium payments for overtime, and with industries weighted in proportion to their 1939 employment.

² In obtaining these monthly averages it has been assumed that the increase for each month is computed as a percentage of the rate at the beginning of that month. In most cases, therefore, the monthly figures are slightly lower than those computed by dividing the percentage for an entire period by the number of months in the period.

³ Partly estimated.

⁴ Revision of previously published data.

CAUSES OF WAGE-RATE CHANGES

Factors responsible for the advance in wage rates are to be found in general wage changes affecting a significant proportion of the workers in an establishment, merit increases and other individual wage adjustments, and greater incentive earnings. Labor turn-over also exercised some influence.

General wage changes, reported by approximately a tenth of all establishments surveyed, were an influencing but not a major factor in the advance in manufacturing rates. The total increase in wage rates that can be ascribed to general wage changes is about 0.5 percent, which is not quite a third of the total increase.

Individual wage adjustments, including merit increases, account for the major portion of the advance in wage rates. The effect of such adjustments is seen in greater intraplant concentration of workers near the top of established rate ranges than was observed in 1944. The advance for incentive workers² as a group was somewhat greater than that for time workers, despite the fact that some incentive workers experienced decreased earnings. Whereas the average increase

² For incentive workers, average hourly earnings exclusive of premium overtime and late-shift pay are used in lieu of wage rates. Numerous variables affecting piece and bonus rates make infeasible the use of such rates in the Bureau's index.

for all workers was 1.6 percent, rates of time workers increased only 1.3 percent, which is not an insignificant difference in view of the fact that about two-thirds of all manufacturing workers are time workers. Furthermore, the greatest industry-wide advance in wage rates occurred in industries which pay large groups of workers on a piece-rate basis. Observations for previous periods likewise have disclosed relatively greater increases for incentive workers than for time workers.

Labor turn-over had various and somewhat counterbalancing effects on wage rates. Many employers made replacement, or increased employment, by hiring workers at the lower rates in established wage-rate ranges. Partially offsetting the accessions in lower brackets were the practices of reducing employment when necessary by releasing lower-rate persons first and, by some employers, of hiring at top-bracket rates. The effect on the national index of labor turn-over and of local interplant employment shifts is believed to be negligible.

WAGE-RATE CHANGES IN INDUSTRY GROUPS

The amount of change in wage rates shown by groups of related manufacturing industries between October 1944 and April 1945 varied from an increase of 0.1 percent for products of petroleum and coal to a 6.7-percent increase for apparel and allied products (table 2). Leather and leather products advanced 4.2 percent. Both the apparel and the leather-products groups contain a large proportion of piece workers. Tobacco manufactures was a third industry group that had increased rates substantially above the average increase for all manufacturing for the 6-month period. The 3.7-percent increase registered by tobacco manufactures was the greatest 6-month advance shown for the tobacco industries since April 1943, and brought the total increase for the industry group since April 1943 up to the average for all manufacturing industries. Some of the increase in the tobacco industries resulted from general improvement in the wage status of workers in the lower brackets, in line with War Labor Board policy concerning substandard wages. The greatest changes, however, were in the cigar industry and can be traced directly to substantial increases in incentive earnings. The printing, publishing, and allied industries and the rubber-products industries also registered above-average wage increases.

Significant reductions in previous rates of increase are observed in textile-mill products, furniture, chemicals, and metalworking. As the National War Labor Board's February decision permitting increases for the lower-paid workers in a large portion of the textile industry did not receive approval by the Director of Economic Stabilization until May, changes resulting from that decision were not reflected in the April index. Shipbuilding showed a small increase which was at least partially due to adjustments of occupational wage differentials in East Coast yards in line with a War Labor Board directive. As a result of shifting incentive earnings, the iron and steel industry partially regained a slight wage loss it had experienced during the preceding period. The War Labor Board's basic steel decision of November 25, 1944, concerns primarily shift-differential pay and vacations, and probably will not affect basic wage rates materially, although some increases eventually may take place in average basic wage rates as the result of intraplant adjustments in occupational differentials.

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TABLE 2.—Percent of Change in Urban Wage Rates in Manufacturing, by Industry Group, April 1943 to April 1945

Industry group	Percent of change from—				
	April 1943 to October 1943	October 1943 to April 1944	April 1944 to October 1944	October 1944 to April 1945	April 1943 to April 1945
All industries.....	+3.8	+1.9	+2.2	+1.6	+9.9
Food and kindred products.....	+3.2	+1.1	+1.9	+1.4	+7.7
Tobacco manufactures.....	+1.1	+3.1	+1.7	+3.7	+10.0
Textile-mill products.....	+2.7	+2.7	+2.3	+1.1	+9.2
Apparel and allied products.....	-.2	+5.0	+7.6	+6.7	+20.4
Lumber and timber basic products.....	(1)	(1)	(1)	(1)	(1)
Furniture and finished lumber products.....	+3.4	+1.8	+2.9	+1.0	+9.5
Paper and allied products.....	+5.2	+2.2	+1.7	+4.4	+9.6
Printing, publishing, and allied industries.....	+3.1	+1.6	+2.5	+2.1	+9.6
Chemicals and allied products.....	+2.4	+1.3	+1.2	+8.8	+5.7
Products of petroleum and coal.....	-.3	(2)	+3.3	+1.1	+1.1
Rubber products.....	+2.0	+2.5	+1.4	+2.0	+8.2
Leather and leather products.....	+4.5	+4.0	+4.2	+4.2	+18.0
Stone, clay, and glass products.....	(1)	(1)	(1)	(1)	(1)
Basic iron and steel.....	(3)	+7.7	+6.6	+4.4	+19.5
Shipbuilding.....	+4.4	+4.4	+5.5	+8.8	+22.1
Metalworking (except basic iron and steel and shipbuilding).....	+5.4	+1.9	+2.0	+1.2	+10.7

¹ Representation inadequate to show percent of change.

² Less than a tenth of 1 percent.

³ Data not available for April 1943.

⁴ Revision of previously published data.

⁵ October 1943 to April 1945.

REGIONAL COMPARISONS

Urban wage rates in manufacturing industry advanced above the average increase for the country as a whole in 3 of the 9 economic regions into which the country has been divided for purposes of analyzing wage movements (table 3). The Middle Atlantic States increased by 2.3 percent between October 1944 and April 1945, the Southeastern States by 2.1 percent, and New England by 2.0 percent. The industry groups which showed the largest increases—namely, apparel, leather products, and tobacco—are largely concentrated in these 3 regions. The textile industries in the Southeastern States increased by only 1.3 percent in comparison with the region's 2.1 percent, but the lower percentage increase in textiles was offset by substantial regional advances in wage rates in several other industries, notably the metalworking industries, apparel, chemicals, basic iron and steel, tobacco, and food. An actual reduction in average wage rates by seven-tenths of 1 percent for the region as a whole occurred in the Mountain States, principally as the result of a 2.1-percent reduction in the average wage rates for Denver, Colo. The decline in the Denver average was due partially to a loss in incentive earnings, but primarily to a decline of employment in certain high-wage establishments.

Memphis showed the greatest wage-rate increase among the 28 large cities for which separate data can be presented. The 6.0-percent increase for Memphis for April 1945 represented advances in wage rates for most of the manufacturing industries of that city. This same situation existed in Birmingham, where wages advanced 4.1 percent.

The increase in New York City rates of 4.7 percent was influenced largely by the sharp rise in apparel wages, although small increases were registered by several industries. A slight decline occurred in Pittsburgh, in addition to the 2.1-percent reduction previously mentioned for Denver. The reduction in Pittsburgh, as in Denver, was the result, not of wage cuts but rather of a combination of factors including labor turn-over and lowered incentive earnings because of reduced production.

A comparison of the combined average increase in wage rates for large cities (100,000 population and over) with the average increase for smaller cities indicates but slight variation by size of city. The larger cities showed an increase of 1.7 percent and the smaller cities showed an increase of 1.4 percent.

TABLE 3.—*Percent of Change in Urban Wage Rates in Manufacturing, by Economic Region and Selected Area, April 1943 to April 1945*

Economic region and urban area ¹	Percent of change from—				
	April 1943 to October 1943	October 1943 to April 1944	April 1944 to October 1944	October 1944 to April 1945	April 1945 to April 1945
All regions.....	+3.8	+1.9	+2.2	+1.6	+9.9
New England.....	+3.2	+1.3	+2.1	+2.0	+8.9
Boston.....			+1.1	+3.7	+12.1
Providence.....			+2.3	+9	+6.6
Middle Atlantic.....	+2.6	+2.9	+3.5	+2.3	+11.7
Buffalo.....			+5	+1.8	+14.4
Newark.....			+2.8	+9	+12.2
New York.....			+6.4	+4.7	+17.5
Philadelphia.....			+2.3	+1.6	+7.8
Pittsburgh.....			+2.2	-.3	+4.7
Border.....	+1.6	+2.0	+1.4	+7	+5.8
Baltimore.....			+1.6	+5	+5.0
Louisville.....			+3.3	+1.3	+10.2
Southeast.....	+3.6	+2.7	+1.8	+2.1	+10.6
Atlanta.....			+2.7	+2.9	+11.0
Birmingham.....			+1.2	+4.1	+11.1
Memphis.....			+2.0	+6.0	+15.1
Great Lakes.....	+5.1	+1.3	+1.7	+1.3	+8.7
Chicago.....			+3.0	+2.1	+10.4
Cleveland.....			+2.7	+1.0	+10.4
Detroit.....			+3	0	+6.4
Indianapolis.....			+1.4	+6	+6.6
Milwaukee.....			+3.1	+1.5	+7.7
Minneapolis.....			+1.2	+1.6	+6.6
Middle West.....	+4.8	+3.3	+1.1	+1.3	+10.9
Kansas City.....			+1.7	+3.1	+8.1
St. Louis.....			+1.0	+8	+12.7
Southwest.....	+4.2	+1.2	+1.5	+1.1	+8.2
Dallas.....			+1.7	+2.4	+13.7
Houston.....			+8	+1	+2.7
New Orleans.....			+1.0	+1.0	+10.0
Mountain.....	+3.0	+2.3	+2.7	-.7	+7.3
Denver.....			+1.8	-2.1	+7.2
Pacific.....	+4.6	+1.3	+1.0	+1.1	+8.2
Los Angeles.....			+1.3	+1.2	+10.9
Portland.....			+8	+2	+1.4
San Francisco.....			+8	0	+2.1
Seattle.....			+4	+3	+1.0

¹ The data are based on observations in 69 areas. For the names of other areas within the various regions, see Monthly Labor Review, October 1944 (p. 600).

² Revision of previously published data.

CHART 2

PERCENTAGE INCREASE IN WAGE RATES 28 URBAN AREAS.

MANUFACTURING AND NONMANUFACTURING INDUSTRIES

APRIL 1943 - APRIL 1945

UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

Wage Movements in Nonmanufacturing Industries

The nonmanufacturing index represents only selected nonmanufacturing industry groups; namely, wholesale trade, retail trade, finance, insurance and real-estate establishments, local utilities, and the service industries. Urban wage rates rose 3.7 percent in these industries between October 1944 and April 1945. This increase in wage rates, although greater than the advance in wages recorded for the same months of 1943 and 1944, represented a decline in the rate of increase as compared with the April 1944–October 1944 period (table 4). It brings to 17.9 percent the increase in wage rates since April 1943 for the selected nonmanufacturing industries.

The factors responsible for wage-rate changes in these nonmanufacturing industries appear to be the same as those causing wage-rate gains in manufacturing; namely, general changes in establishment wages simultaneously affecting substantial groups of workers, merit increases and other individual wage adjustments, labor turn-over, and, in some industries, increased incentive earnings. Of these, individual wage adjustments are the most important. War Labor Board policy with respect to substandard wages permits substantial and widespread rate increases in these relatively low-wage industries. The increase in wage rates chargeable to general wage-rate changes for the October 1944–April 1945 period was only 0.7 percent, or less than a fifth of the total percentage change.

TABLE 4.—Percent of Change in Urban Wage Rates in Selected Nonmanufacturing Industries, by Industry Group, April 1943 to April 1945

Industry group ¹	Percent of change from—				
	April 1943 to October 1943	October 1943 to April 1944	April 1944 to October 1944	October 1944 to April 1945	April 1943 to April 1945
Total, selected industries.....	+6.4	² +2.5	² +4.2	+3.7	+17.9
Wholesale trade.....	+2.5	+2.0	+2.9	+1.5	+9.2
Retail trade.....	+9.2	² +2.7	² +5.7	+4.6	+24.0
Finance, insurance, and real estate.....	+3.9	+3.1	+1.6	+4.5	+13.7
Local utilities.....	+1.5	+1.1	+1.3	+1.5	+4.5
Service trades.....	+6.4	+2.4	+5.4	+3.2	+18.4

¹ The specific industries selected to represent these groups in the measurement of wage-rate changes were as follows: *Wholesale trade*—general-line wholesale groceries; *retail trade*—department stores, clothing stores, and groceries; *finance, insurance, and real estate*—banks and savings and loan associations; *local utilities*—electric light and power or gas companies; *service trades*—hotels, power laundries, and auto-repair shops.

² Revision of previously published data.

WAGE-RATE CHANGES IN INDUSTRY GROUPS

Retail trade, which employs almost as many urban workers as all the other combined nonmanufacturing industries covered by the index, again showed the greatest gain of any of the 5 industry groups studied. The rate of increase in retail-trade wage rates amounted to 4.6 percent, as compared with 5.7 percent advance for the previous 6-month period. Since wage rates for time workers in this industry group advanced only 2.6 percent during the 6-month period ending in April 1945, it is evident that workers paid on a commission basis were the principal beneficiaries of wage increases. The amount of increase in wage rates for all retail-trade workers was far from uniform

throughout the country, ranging from 0.5 percent in the Pacific States to 7.1 percent in the Border States. With this latest increase in the retail-trade index, wage rates for the industry group as a whole have advanced 24.0 percent since April 1943; for individual regions the total increase registers a low of 13.6 percent in the Pacific States and a high of 32.3 percent in the Southwest. The trend of urban wage rates for retail trade in each of the 9 economic regions is presented in table 5.

The service trades, in which an advance of 5.4 percent in wage rates was observed for the previous 6-month period, likewise showed a diminished rate of increase for the October 1944–April 1945 period, when wage rates rose only 3.2 percent. A little more than a third of this rise in basic wage rates resulted from general wage changes. Increases in incentive earnings were reported for the auto-repair shop division of the service-trades group, but individual wage adjustments apparently were the most important factor contributing to the rise in wage rates for the industry group as a whole. The total increase for these service industries from April 1943 to April 1945 was 18.4 percent. The amount of increase for each region is shown in table 5.

TABLE 5.—*Percent of Increase in Urban Wage Rates in Retail Trade and Service Trades, by Economic Region, April 1943 to April 1945*

Economic region	Percent of increase					
	Retail trade			Service trades		
	April 1943 to April 1944	April 1944 to April 1945	April 1943 to April 1945	April 1943 to April 1944	April 1944 to April 1945	April 1943 to April 1945
All regions.....	¹ 12.1	10.6	24.0	8.9	8.7	18.4
New England.....	¹ 7.2	8.3	16.1	6.8	8.3	15.6
Middle Atlantic.....	12.0	11.4	24.8	6.6	5.4	12.4
Border.....	14.7	9.1	25.1	11.8	9.8	22.7
Southeast.....	¹ 13.5	13.8	29.1	13.2	13.7	28.7
Great Lakes.....	¹ 13.8	11.6	27.0	7.3	10.4	18.5
Middle West.....	15.5	9.1	26.0	15.8	11.2	28.8
Southwest.....	21.3	9.1	32.3	16.4	11.1	29.4
Mountain.....	7.4	10.2	18.4	8.4	6.7	15.7
Pacific.....	4.9	8.3	13.6	8.0	7.5	16.1

¹ Revision of previously published data.

Urban wage rates in finance, insurance, and real-estate offices advanced more between October 1944 and April 1945 than during any other 6-month period since the index was started in April 1943. The increase was approximately the same amount (4.5 percent) as that shown by retail trade, although the total increase since April 1943 in the finance-industries group was only 13.7 percent as contrasted with a 24.0-percent rise in retail trade. Merit promotions for women workers in positions which men formerly occupied in these financial, insurance, and real-estate offices apparently were a more important factor during the recent survey period than previously. General wage changes accounted for less than a fifth of the total change in wage rates.

Wage rates showed a great deal more stability in wholesale trade and local utilities than in other nonmanufacturing industries studied.

They advanced only 1.5 percent in each of the two industry groups during the recent survey period, and showed relatively small increases over the entire period covered by the index.

TABLE 6.—Percent of Change in Urban Wage Rates in Selected Nonmanufacturing Industries, by Economic Region and Selected Area, April 1943 to April 1945

Economic region and urban area ¹	Percent of change from—				
	April 1943 to October 1943	October 1943 to April 1944	April 1944 to October 1944	October 1944 to April 1945	April 1943 to April 1945
All regions.....	+6.4	² +2.5	² +4.2	+3.7	+17.9
New England.....	+3.3	+2.3	+3.5	+4.0	+13.7
Boston.....			+3.3	+4.1	+13.8
Providence.....			+1.3	+5.6	+9.5
Middle Atlantic.....	+5.6	+2.3	+3.0	+4.8	+16.7
Buffalo.....			+2.0	+2.0	+8.6
Newark.....			+3.8	+2.4	+19.7
New York.....			+3.2	+6.2	+17.7
Philadelphia.....			+1.9	+4.2	+19.8
Pittsburgh.....			+2.1	+2.3	+10.4
Border.....	+6.5	+4.6	+2.4	+4.8	+19.5
Baltimore.....			+2.7	+3.6	+16.5
Louisville.....			+2.6	+4.0	+23.5
Southeast.....	+9.3	² +3.6	² +6.4	+4.8	+26.2
Atlanta.....			+6.3	+5.6	+27.7
Birmingham.....			+8.8	+2.2	+24.6
Memphis.....			² +8.7	+7.7	+23.1
Great Lakes.....	+8.2	² +2.1	² +6.0	+3.0	+20.6
Chicago.....			+6.3	+3.8	+23.4
Cleveland.....			+3.5	+1.9	+17.2
Detroit.....			+5.5	+2.5	+25.6
Indianapolis.....			² +2.1	-.3	+9.3
Milwaukee.....			+4.6	+3.5	+20.3
Minneapolis.....			+7.6	+4.1	+11.0
Middle West.....	+8.6	+3.0	+2.6	+4.2	+19.5
Kansas City.....			+1.1	+5.7	+19.3
St. Louis.....			+3.9	+3.5	+19.2
Southwest.....	+11.4	+5.6	+3.5	+3.8	+26.3
Dallas.....			+8	+2.1	+25.4
Houston.....			+3.2	+1.7	+22.1
New Orleans.....			+1.7	+2.1	+23.8
Mountain.....	+4.0	+2.7	+4.9	+2.8	+15.2
Denver.....			+3.3	+4.9	+14.0
Pacific.....	+2.7	+1.8	+4.3	+7	+9.8
Los Angeles.....			+3.0	+2.5	+12.3
Portland.....			+6.6	-1.0	+10.1
San Francisco.....			+5.9	-2.0	+7.3
Seattle.....			+4.0	+4	+6.0

¹ The data are based on observations in 69 areas. For the names of other areas within the various regions, see Monthly Labor Review, October 1944 (p. 690).

² Revision of previously published data due to changes in sample.

REGIONAL COMPARISONS

The greatest regional increases for the recent 6-month period (4.8 percent) occurred in the Southeastern, Middle Atlantic, and Border States. The index for the combined nonmanufacturing industries in April 1945 showed a total increase since April 1943 of 26.2 and 26.3 percent, respectively, in the Southeast and Southwest; 19.5 to 20.6 percent in the Middle West, Border, and Great Lakes regions; 15.2 and 16.7 percent, respectively, in the Mountain and Middle Atlantic States; 13.7 percent in New England; and 9.8 percent in the Pacific States.

Among the 28 large cities for which data can be shown, the largest increases (exceeding 5 percent) for the recent 6-month period were observed in Providence, New York, Atlanta, and Kansas City. Decreases, ranging from 0.3 to 4.1 percent, were registered for Indian-

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apolis, Portland, San Francisco, and Minneapolis. Since April 1943, nonmanufacturing wage rates in 10 of the 28 cities showed increases amounting to between 20 and 28 percent; in 7 cities the increase was from 15 to 20 percent, in 6 from 10 to 15 percent, and in 5 only 5 to 10 percent.

A study of both regional and individual city data on wage trends during the period of wage stabilization seems to indicate that there occurred over this period a narrowing of previously existent regional differences in wage rates. The largest increases took place in the low-wage areas. Thus, in the generally high-wage Pacific region rates advanced only 6.0 percent in Seattle since April 1943, whereas lower-wage Los Angeles showed a 12.3-percent increase; in the Middle Atlantic region Buffalo advanced 8.6 percent, and Philadelphia 19.8 percent; in the lower-wage Southeast and Southwest areas, substantially larger increases were observed (for example, 24.6 percent in Birmingham and 25.4 percent in Dallas). Except in a few cases where special factors control the situation, advances in wage rates over the long period can be correlated with prestabilization wage levels.

An analysis of trends in nonmanufacturing wage rates in relation to size of city discloses a 5.6-percent increase for small cities and a 3.3-percent increase for large cities since October 1944. The total increase from April 1943 to April 1945 was approximately 20 percent in small cities and a little more than 17 percent in large cities.



Revised Estimates of Factory Wage Earners Paid Less Than 65 Cents per Hour

IN RESPONSE to numerous inquiries, arising out of current proposals to amend the Fair Labor Standards Act to provide a 65-cent minimum wage, the Bureau of Labor Statistics has brought up to date its estimates of the distribution of manufacturing wage earners by hourly rates of wages. The present distributions represent the situation in the summer of 1945 and are comparable with earlier estimates for 1941 and 1943.¹ Although certain employees in nonmanufacturing industries are also subject to the provisions of the act, the Bureau has not prepared estimates for nonmanufacturing.

Approximately 12,200,000 wage earners were employed in all manufacturing industries during the summer of 1945. The accompanying table shows the estimated distribution of these wage earners by hourly wage rates.² As indicated by this distribution, approximately 2,380,000 workers (about 20 percent of the total) are believed to receive less than 65 cents an hour. These estimates indicate a substantial change from the situation in 1941, when somewhat more than 5,000,000 workers, or about half of the total number of workers employed in manufacturing industries, earned less than 65 cents an hour.

¹ For a brief description of the methods involved in the preparation of these estimates see *Distribution of Factory Workers by Hourly and Weekly Earnings*, in *Monthly Labor Review*, June 1942. For estimates relating to 1941 and 1943, see *The Level of Factory Wage Rates in Wartime*, in *Monthly Labor Review*, October 1943.

² Premium payments for overtime and work on late shifts are excluded.

Estimated Distribution of Wage Earners in Manufacturing Industries, by Hourly Wage Rates, Summer of 1945

Straight time hourly rate	Number	Percent
All rates.....	12,200,000	100
40 and under 50 cents ¹	330,000	3
50 and under 60 cents.....	1,230,000	10
Under 65 cents.....	2,380,000	20
60 and under 70 cents.....	1,400,000	12
70 and under 80 cents.....	1,400,000	12
80 and under 90 cents.....	1,460,000	12
90 and under 100 cents.....	1,450,000	12
100 and under 110 cents.....	1,230,000	10
110 and under 120 cents.....	1,010,000	8
120 and under 130 cents.....	920,000	7
130 and under 140 cents.....	620,000	5
140 and under 150 cents.....	410,000	3
150 and under 160 cents.....	280,000	2
160 cents and over.....	460,000	4

¹ Includes a few workers receiving less than 40 cents an hour.

As would be expected, the proportion of workers earning less than 65 cents per hour varies widely by industry. It is believed that only a negligible proportion of the workers in the transportation-equipment industry (shipbuilding, aircraft, tanks, etc.) earned less than 65 cents an hour. Thus, a 65-cent minimum wage would have little effect on this industry. The tobacco industry and the basic lumber and timber group, on the other hand, would be substantially affected, as over half of the workers in these industries are believed to be earning less than the proposed minimum of 65 cents. Because of existing regional variations in general wage levels, of course, not all employers would be affected to the same extent. In the basic lumber and timber group, for instance, the West Coast employers would be affected very little while employers in the Midwest and South, where wage levels are generally lower, would be required to adjust wages substantially.

The tabulation below shows the estimated proportion of workers in the various industry groups receiving less than 65 cents an hour in the summer of 1945.

	Percent earning less than 65 cents
All manufacturing.....	20
Tobacco.....	58
Lumber and timber.....	54
Textiles.....	47
Apparel.....	38
Furniture.....	37
Leather.....	30
Paper.....	30
Food.....	28
Stone, clay, and glass.....	27
Electrical equipment.....	22
Printing and publishing.....	21
Chemicals, petroleum, and coal products.....	16
Rubber.....	13
Nonferrous metals.....	8
Iron and steel.....	7
Machinery.....	4
Transportation equipment.....	(1)

¹ Less than half of 1 percent.

Trend of Factory Earnings, 1939 to June 1945

THE published average earnings of factory workers are summarized in the accompanying table for selected months from January 1939 to June 1945.¹ The earnings shown in this table are on a gross basis (i. e., before deductions for social security, income and victory taxes, bond purchases, etc.).

Weekly earnings in all manufacturing averaged \$46.35 in June 1945—99.9 percent above the average in January 1939, 74.0 percent above January 1941, and 19.2 percent above October 1942. Such factors as longer hours of work, merit increases for individual workers, premium pay for overtime worked, changing composition of the labor force within plants, shifts in the distribution of workers among plants and among industries, as well as wage-rate increases, account for the rise in earnings.

Gross hourly earnings in all manufacturing averaged 103.9 cents in June 1945—64.4 percent above the average in January 1939, 52.1 percent above January 1941, and 16.3 percent above October 1942.

Straight-time average hourly earnings, as shown in columns 7 to 9, are estimated to exclude premium pay at time and a half for work in excess of 40 hours. The effect of extra pay for work on supplementary shifts and on holidays is included. For all manufacturing, the straight-time average in June 1945 was 97.0 cents per hour; this was 55.7 percent higher than in January 1939, 46.1 percent above January 1941, and 15.6 percent above October 1942.

Earnings of Factory Workers in Selected Months, 1939 to June 1945

Month and year	Average weekly earnings			Average hourly earnings			Estimated straight-time average hourly earnings ¹			Estimated straight-time average hourly earnings weighted by January 1939 employment ²		
	All manufacturing	Durable goods	Non-durable goods	All manufacturing	Durable goods	Non-durable goods	All manufacturing	Durable goods	Non-durable goods	All manufacturing	Durable goods	Non-durable goods
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1939: Jan.	\$23.19	\$25.33	\$21.57	\$0.632	\$0.696	\$0.583	\$0.623	\$0.688	\$0.574	\$0.623	\$0.688	\$0.574
1940: Jan.	24.56	27.39	22.01	.655	.717	.598	.644	.703	.589	.635	.697	.589
1941: Jan.	26.64	30.48	22.75	.683	.749	.610	.664	.722	.601	.648	.711	.600
1942: Jan.	33.40	38.98	26.97	.901	.890	.688	.762	.835	.670	.729	.810	.667
July.	36.43	42.51	28.94	.856	.949	.725	.809	.885	.701	.759	.846	.694
Oct.	38.89	45.31	30.66	.893	.990	.751	.839	.919	.723	.782	.869	.716
1943: Jan.	40.62	46.68	32.10	.919	1.017	.768	.859	.941	.733	.794	.886	.724
Apr.	42.48	48.67	33.58	.944	1.040	.790	.878	.959	.751	.808	.897	.741
July.	42.76	48.76	34.01	.963	1.060	.806	.899	.981	.766	.823	.919	.750
Oct.	44.86	51.26	35.18	.988	1.086	.824	.916	.997	.781	.836	.929	.765
Dec.	44.58	50.50	35.61	.995	1.093	.832	.927	1.011	.788	.846	.942	.773
1944: Jan.	45.29	51.21	36.03	1.002	1.099	.838	.931	1.013	.793	.850	.945	.778
Apr.	45.55	51.67	36.16	1.013	1.110	.850	.942	1.023	.806	.862	.955	.792
July.	45.43	51.07	37.05	1.018	1.116	.862	.950	1.035	.815	.874	.973	.799
Oct.	46.94	53.18	37.97	1.031	1.129	.878	.956	1.038	.829	.881	.969	.815
Dec.	47.44	53.68	38.39	1.040	1.140	.883	.963	1.046	.832	.886	.975	.818
1945: Jan.	47.50	53.54	38.66	1.046	1.144	.891	.970	1.053	.840	.894	.984	.825
Apr.	47.12	52.90	38.80	1.044	1.138	.899	.971	1.050	.850	.899	.986	.834
May ³	46.01	51.55	38.21	1.043	1.134	.904	.977	1.055	.859	.908	.993	.843
June ³	46.35	51.79	38.96	1.039	1.131	.905	.970	1.049	.855	.905	.991	.840

¹ Average hourly earnings, excluding the effect of premium pay for overtime.

² Average hourly earnings, excluding premium pay for overtime, weighted by man-hours of employment in the major divisions of the manufacturing industry, for January 1939.

³ Preliminary.

¹ Compare Trends in Factory Wages, 1939-43, in Monthly Labor Review, November 1943 (pp. 869-884), especially table 4 (p. 879). For detailed data regarding weekly earnings, see Detailed Reports for industrial and Business Employment, June 1945, table 6 (p. 598), in this issue.

The shift of workers from relatively low-wage to relatively high-wage industries since 1939 would have raised the average earnings of factory workers, even if no other influences had been present. The effects of such interindustry shifts have been eliminated from the averages shown in columns 10 to 12 of the table. If employment had been distributed between industries as it was in January 1939, the straight-time hourly earnings of factory workers would have averaged 90.5 cents in June 1945, or 45.3 percent above the corresponding average in January 1939, 39.7 percent above January 1941, and 15.7 percent above October 1942. Between May and June 1945 the decrease in straight-time hourly earnings, after eliminating the influence of shifting employment, amounted to 0.3 percent. Even this latter series of averages exaggerates the rise in wage rates, because it includes the influence of interplant shifts of employment, merit increases for individual workers, and premium rates for work on extra shifts and on holidays.

Salaries of Public Health Nurses, 1944

IN 1944 median annual salaries of field nurses employed by State, county, and municipal health departments, boards of education, and other agencies represented in a survey by the National Organization for Public Health Nursing,¹ ranged from \$1,542 to \$2,052, as shown in the accompanying table based on data for 645 agencies. Individual salaries showed considerably more variation, however: school nurses were paid as little as \$900 by one board of education, while another paid as much as \$3,300; the minimum for staff nurses in one nonofficial agency was \$1,080 and the maximum in another, \$2,550.

TABLE 1.—Median Salary Scales for Field Nurses, With Amounts of Increases, 1942-44

Item	State health departments	County health departments	Municipal health departments	Non-official agencies	Boards of education ¹	Combination agencies
Median minimum salaries, 1944 ²	\$1,542	\$1,704	\$1,760	\$1,562	\$1,602	\$1,629
Median maximum salaries, 1944 ²	2,052	1,984	1,902	1,840	1,869	1,965
Increase in minimum salaries, 1942-44 ³	195	202	204	183	188	222
Increase in maximum salaries, 1942-44 ³	240	209	260	183	180	240

¹ Salaries in most boards of education are paid on a 10-month basis.

² Salaries given are those in the median agency in each group.

³ Measured by median increase among agencies reporting.

During the period 1942-44 some agencies gave salary increases, some gave bonuses to help meet increased living expenses, and some gave both salary increases and bonuses. Increases were most numerous among combination agencies and least numerous among boards of education. About half of the nonofficial agencies and county health departments raised salary scales. Increases were found to be more usual in maximum than in minimum salaries; and the amounts of increases in top salaries tended to be greater. Of the 645 agencies

¹ Data are from Public Health Nursing (New York 19), April 1945 (p. 203): Salary Scales and Bonuses, 1944, by Dorothy E. Wiesner and Margaret M. Murphy.

reporting, 289, or 45 percent, raised both minimum and maximum salaries, and 39, or 6 percent, raised either the upper or the lower limit. During 1943 bonuses were granted by 185 of the agencies, 153 giving flat sums ranging from under \$100 to \$420 (by a western board of education), 21 giving bonuses as percentages (ranging from less than 10 to 17 percent) of annual salaries, and 11 giving bonuses in other forms. Of the 185 agencies which granted bonuses, 56 also had increased both minimum and maximum salaries and 15 others had increased either the minimum or the maximum. Of 169 agencies that reported no bonuses for 1942, 1943, or 1944, 89 had raised both upper and lower salary limits and 12 others, either the upper or the lower limit. Agencies not granting bonuses, the survey indicated, were more likely to have raised salary scales.

A few agencies reported payment for overtime work, but the policy of the majority was to give the nurses an equivalent amount of time off duty.



Problem of Wage-Price Adjustments in Switzerland¹

A RISE of 1 point in the official Swiss cost-of-living index, to 153 (January–August 1939=100) in April and May 1945, after the index had remained stable at 152 for 10 months, focused attention on the problem of bringing wages and prices into closer relation. Using the same base period, nominal wages had advanced to 142 by March 1945, but the index of real wages was only 93. Governmental agencies, as well as certain representatives of organized labor, were of the opinion that the 1939 level of real wages should be reestablished, but differences existed as to the means by which the desired objectives should be attained—whether primarily through the reduction of prices by means of heavy subsidies, or by wage increases accompanied by a price-control program. Trade-unionists also raised the question as to whether, after the war, labor should have a larger share of the industrial product of Switzerland, the claim being that even before hostilities commenced in 1939, the wages of Swiss workers were proportionately lower than in other democratic nations.

Fluctuations in the indexes of cost of living and of nominal and real wages are shown in the table on page 534, from the last quarter of 1939 through the first quarter of 1945.

Position of the Full Powers Commission

On January 26, 1945, definite principles and proposals for reducing the gap between wages and retail prices were embodied in a resolution adopted by the Full Powers Commission of the National Council (lower House of Parliament), a body composed of 27 members, of whom 8 were Socialists. The Commission recognized the importance of obtaining price stabilization and relative stability of the purchasing power of money, and recommended a return to the 1939 level of real wages by means of increases in nominal wages, within the capacity of employers to bear the cost. Certain subsidies were advocated, to encourage efficiency and to reduce cost of living. Undue wartime

¹ Information is from various issues of *La Vie Économique* (Berne), and confidential sources.

Fluctuations in Cost of Living and in Nominal and Real Wages in Switzerland, 1939-45

Period	Indexes (January-August 1939=100) of—			Wage increase as per- cent of cost-of- living increase	Period	Indexes (January-August 1939=100) of—			Wage in- crease as per- cent of cost-of- living in- crease
	Cost of living	Hourly wages				Cost of living	Hourly wages		
		Nom- inal	Real				Nom- inal	Real	
1939:					1942—Continued.				
January-August	100.0	100.0	100.0	-----	July-September	142.9	123.9	86.7	55.7
October-December	103.9	100.4	96.6	10.3	October-December	146.0	126.9	86.9	58.5
1940:					1943:				
January-March	105.9	101.2	95.6	20.3	January-March	147.3	129.1	87.6	61.5
April-June	109.4	102.9	94.1	30.9	April-June	148.7	130.8	88.0	63.2
July-September	112.1	103.8	92.6	31.4	July-September	149.4	132.5	88.7	65.8
October-December	117.0	105.9	90.5	34.7	October-December	150.2	134.7	89.7	69.1
1941:					1944:				
January-March	119.8	108.1	90.2	40.9	January-March	151.0	135.9	90.0	70.4
April-June	127.9	110.7	86.6	38.4	April-June	152.3	137.5	90.3	71.7
July-September	130.4	113.2	86.8	43.4	July-September	152.2	139.0	91.3	74.6
October-December	134.8	116.4	86.4	47.1	October-December	152.3	140.7	92.4	77.9
1942:					1945:				
January-March	138.0	119.0	86.2	50.0	January-March	152.7	142.0	93.0	79.7
April-June	141.0	121.6	86.2	52.7					

profits were condemned. A price-compensation fund, from which allowances might be paid to producers and consumers to prevent the shifting of increased costs to the consumer, and a guaranteed subsistence or minimum wage were suggested. Recognition was given to the principle that full employment should be given preference over a rigid currency policy, and that only through general economic stabilization could the relation between prices, wages, and currency be adjusted satisfactorily. The Federal Council (the executive agency of the Government) was requested to submit a complete economic statement to the National Council at the September 1945 session, and to consider whether the cost of living could be ameliorated through the use of public funds or other measures to reduce the price of basic consumer goods.

Position of the Government

The Government's position was stated by a member of the Federal Council in reply to a question asked in Parliament on June 15, 1945, regarding the foregoing proposals of the Full Powers Commission. The speaker admitted the existing disparity between the cost of living and earnings of workers and stated that the 1939 level of real wages must be reestablished. However, it was proposed to make a start by reducing prices, rather than by increasing wages as suggested by the Full Powers Commission. To follow the latter course, the Government believed, would start an inflationary spiral. Instead, the 100 million francs available in the war-risk-insurance fund might be used for subsidies to reduce the prices of basic articles of diet and other important commodities. According to the spokesman, the refusal to grant a general wage increase because of the consequent repercussions on living costs would not preclude individual wage increases to bring pay up to the maximum fixed by the Consultative Commission on Wages. In fact, employers were urged to adopt the wage scales recommended quarterly by that Commission.

Position of Representatives of Organized Labor

The general secretary of the Federation of State Railway Employees, although favoring the use of subsidy, believed that prices could not be greatly reduced, and therefore agreed with the Full Powers Commission that an increase in nominal wages was required before a reduction in prices. The Federation of Swiss Trade Unions considered that the recommendations of the Commission represented a distinct advance over the previous attitude; it favored also price stabilization, provided that the principle was not applied too rigidly, and would welcome price-compensation funds as indispensable for reducing the increased burden of higher living costs. Subsidy on basic food and clothing was also approved. Restoration of real wages to the 1939 level was demanded, particularly for those persons in the lower and middle wage brackets, as a means of remedying the progressive impoverishment among large groups in the population. Agreement was expressed with the Full Powers Commission proposal that when each general wage rise occurs, differences in profits during the war should be taken into account. The organization advocated establishment of a minimum wage whereby a suitable existence would be insured. It agreed with the Commission concerning the importance of preventing a disastrous deflationary period after the war, which, it was stated, would bring about unemployment and loss of purchasing power to large segments of the people, thus menacing the entire national economy.

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Wage and Hour Regulation

Wage Increases Based on New Labor-Contract Law in Mexico¹

SIGNIFICANT in Mexican labor legislation is the new labor-contract law which became effective June 6, 1945. This measure, which appears to have been occasioned by the textile strikes of early June, has as its purpose the elimination of strikes and shut-downs incident to the termination of the legal period of obligatory labor contracts. Under the new statute the provisions of an existing labor contract will remain in force until a new agreement is reached, regardless of the termination of the period of the contract. The Ministry of Labor will schedule negotiations for the revision and renewal of contracts, and is empowered to enforce participation in such negotiations. In cases to which the measure is applicable, the Government may invoke it to improve the economic situation of the workers, pending the reaching of a new agreement.

By means of Presidential resolutions based on the new law, the Mexican Government ended the strikes in the textile industries. A resolution effective June 7 granted an increase of 22 percent in the cotton-goods industry. Woolen workers received an increase of 22 percent on daily wages or 19 percent on piecework, effective June 8, and rayon and silk workers an increase of 23 percent on daily wages or 20 percent on piecework.

Minimum Wages of New Zealand Agricultural Workers²

MINIMUM wages of dairy workers in New Zealand rose 67 percent between July 1937 and August 1944. Wage rates of these workers were fixed under the Agricultural Workers' Act of 1936, which established the first regulation in New Zealand of wages and working conditions in agriculture. The act provided for the setting of minimum rates of pay and for periodical revision of the scale in accordance with changes in guaranteed prices of primary products. Originally, only workers on dairy farms were covered, but the provisions of the act were later extended to workers in orchards; on farms producing wool, meat, or grain; in market gardens and nurseries; and on tobacco farms.

As shown in the accompanying table, total rates for dairy workers—including both cash payments and the allowance for board and

¹ Data are from airgram A-1968, United States Embassy, Mexico City, June 29, 1945.

² Data are from New Zealand Official Yearbook (Census and Statistics Department, Wellington), 1942; Standard (official organ of the New Zealand labor movement, Wellington), February 1 and April 5, 1945; and report (No. 633) from United States Legation, Wellington, May 19, 1945.

lodging—rose from £3³ weekly in July 1937 to £5 in August 1944. Effective August 1, 1944, all male workers aged 21 years or over were to receive £4 in cash, plus board and room. If board and room were not provided, the worker was to be paid an additional £1. Cash payments to workers under age 21 years ranged from £1 12s. 9d. for those under 17, to £3 10s. 9d. for persons aged 20 to 21 years.

Minimum Weekly Wages of Dairy Workers in New Zealand, as of Specified Dates

Date	Minimum weekly pay		
	Total	Cash	Value of board and room
	£. s. d.	£. s. d.	£. s. d.
Aug. 1, 1944.....	5 0 0	4 0 0	1 0 0
Aug. 1, 1943.....	4 0 0	3 0 0	1 0 0
Aug. 1, 1942.....	3 17 6	2 17 6	1 0 0
Aug. 1, 1938.....	3 12 6	2 12 6	1 0 0
Nov. 1, 1937.....	3 2 6	2 5 0	0 17 6
July 1, 1937.....	3 0 0	2 2 6	0 17 6

Cash wages of the four other groups of agricultural workers as shown below were in effect in 1944, with the exception of those of the farm and station hands,⁴ which were established in April 1945.

	Minimum		
	£	s.	d.
Outdoor workers (weekly).....	3	15	9
Farm and station hands (weekly).....	3	15	0
Market-garden and soft-fruit garden workers (weekly).....	4	0	0
Tobacco workers (hourly).....	0	2	3

The first two groups were to receive board and room in addition, and it was stipulated that if board and room were not provided, outdoor workers were to be paid an extra 19s. 3d., and farm and station hands an extra £1. No room-and-board requirements were made for the other two groups.



Wage Regulation in Venezuelan Tire and Baking Industries

*Wage Increase for Tire-Factory Workers*⁵

IN A recent controversy involving workers in the only factory in Venezuela manufacturing automobile tires, the Government stepped in before a strike occurred and laid down the terms of settlement by means of an Executive resolution. The settlement is to be binding for 1 year.

The union involved had demanded a general wage increase. The Executive resolution provided for increases over the rates of July 31,

⁵ Average exchange rate of the New Zealand pound in July 1937=\$3.98, in August 1944=\$3.24.

⁴ That is, workers on farms and stations which are used for the commercial production of wool, meat, or grain (including seed).

⁵ Data are from report of Frank P. Corrigan, United States Embassy at Caracas, October 28, 1944 (No. 6637).

1944, as follows: An increase of 2 bolivares⁶ per day for workers with daily earnings of 6 to 8 bolivares, of 1.50 bolivares for those earning 10 bolivares, and of 1.25 bolivares for those earning "10 bolivares or more." These increases included the special 25-bolivar monthly bonus granted by the management in August 1944.

Instead of the 25-percent night-work differential demanded, the resolution allowed one of 12½ percent. The company must provide each worker with two pairs of overalls per year and a third if necessary (the union had demanded three pairs).

Specific improvements in hygiene and safety were to be investigated by the Labor Inspector of the Federal District, as was also the dining room the company promised to build.

*Minimum Wages for Baking Industry*⁷

A resolution establishing the first minimum wage in Venezuela and making the first prohibition of night work, was published in the *Gaceta Oficial* of November 10, 1944. These regulations are applicable to the baking industry; the wage regulation applies to the Caracas area, while the night-work ruling is effective not only in that region but also in the District of Sucre in the State of Miranda. These regulations are to be compulsory for a period of 6 months. In the meantime, owners of the establishments affected are given 90 days from date of publication of the resolution in which to make the necessary adjustments.

The minimum rates, established for an 8-hour day, for the different categories of workers in the bakery industry in the Departamento Libertador of the Federal District (of which Caracas is the center) are as follows:

	Daily rates (in bolivares)
Bakers, foremen	18
Assistant bakers, foremen	16
Skilled workers	12
Semiskilled workers	9
Ordinary workers	5

These rates include the daily bread ration in those cases in which one may be agreed upon.

No reduction in pay is permitted in the case of workers who, on November 10, 1944, were receiving a higher salary than the one established as a compulsory minimum wage.

Night work in bakeries is prohibited from 10 p. m. to 4 a. m. in the above-mentioned areas, but exceptions may be made by the Federal Executive if public interest renders it necessary. In such cases the employees doing night work are to receive 15 percent above the rate for day work.

⁶ Exchange rate of bolivar = 30 cents.

⁷ Data are from report of Frank P. Corrigan, United States Embassy at Caracas, December 1, 1944 (No 6750).

Cost of Living and Retail Prices

Prices in the Second Quarter of 1945

Summary

THE end of the war in Europe during the second quarter of 1945 brought no immediate change in the general trend of prices. Retail prices of living essentials rose 1.7 percent during the period to the highest level since the spring of 1921, but the rise was attributable largely to seasonal advances in prices of fresh fruits and vegetables and to higher costs for clothing, caused by the continued disappearance of lower price lines. Primary-market prices advanced by 0.8 percent from March to June, at a rate slightly greater than during the first quarter of the year. A substantial part of the increase in average primary-market prices was caused by higher prices for farm products, and important industrial materials also advanced. Mill prices for 14 basic steel products were increased in May, and OPA ceiling prices for anthracite and bituminous coal were raised to cover higher production costs. Other fields showed no noteworthy price developments during the quarter. Demand continued strong for most products, while supplies were restricted by shortages of materials and labor. Percentage changes in retail and wholesale prices for specified periods during the war are shown in table 1.

TABLE 1.—Percent of Change in Retail and Wholesale Prices in Specified Periods

From—	Percent of change to June 1945 in—		
	Retail prices of living essentials	Wholesale prices of—	
		All commodities	All commodities except farm products and foods
March 1945: 3 months ago.....	+1.7	+0.8	+0.4
June 1944: Year ago.....	+2.9	+1.7	+1.1
May 1943: Hold-the-line order ¹	+3.1	+1.9	+3.0
May 1942: OPA's General Maximum Price Regulation.....	+11.2	+7.4	+4.1
August 1939: Month before outbreak of war in Europe.....	+30.8	+41.5	+24.3

¹ The President's hold-the-line order was issued on Apr. 8, 1943. The peak of the price rise which had led to this order was reached in May which is, therefore, used for this comparison.

In many respects, the quarter was a period of transition, with a continuation of pressures important in earlier months. Governmental agencies moved rapidly to relieve business uncertainty by announcing programs under which the economy would operate following the end of the European war. On May 11, 3 days after

VE-day, both OPA and WPB announced plans for selective reconversion to a peacetime economy during the war with Japan.

The OPA program, aimed at bringing civilian goods back to the market at 1942 prices, affected principally the metal-using industries in the consumer-durable-goods field. Under the program, the maximum prices of products made by a manufacturer before the war generally were set at 1942 levels, but a formula was drawn up under which adjustments could be granted by OPA.

Widespread industry dissatisfaction with this policy was reported. The inability in some fields to cover costs under 1942 prices and the difficulty of obtaining cost figures necessary for the application of the adjustment formula were principal features of complaints. At the end of the quarter, price adjustments were under consideration in a number of industries.

The WPB program was embodied in the report of its Committee on Period One, the period from victory in Europe to victory over Japan. Major features of the program included the progressive abandonment of limitation orders and regulations as material supplies permitted, the "open ending" of the Controlled Materials Plan on July 1, the probable continuance of preference ratings during the third quarter, and the probable maintenance of distribution and inventory controls during the third quarter. Approximately 125 orders and schedules were abandoned between VE-day and the end of June. Basic controls continued on such products as automobiles, refrigerators, stoves, farm machinery, and radios through the end of the quarter, although in some cases these controls were modified.

Many of the developments during the quarter were not reflected in the market immediately, but were significant as an indication of the direction of developments in later months. Production in general continued at a high rate, with cut-backs in military production important only in a few industries, notably shipbuilding and aircraft. Income payments were at a high rate, but had turned downward from the all-time high reached in February 1945. Observers predicted that the drop in income payments to individuals in April and May, resulting from a decline in manufacturers' pay rolls and a drop in income payments in retail trade, was a significant indication of the movement which could be expected to accelerate during the last half of the year. An increased supply of labor in some areas was not adequate to meet all demands, and manpower continued to be a limiting factor on reconversion.

On the last day of the quarter the authority of the Office of Price Administration was extended through June 1946, without major change. The control of the Secretary of Agriculture over prices and distribution of farm products and foods was defined more clearly, and adjustments were required in ceiling prices for some meats. No alterations were made, however, in the basic principles of price control.

Prices of Consumer Goods

Prices of consumer goods continued to advance during the second quarter of 1945, reflecting the cumulative effect of pressures which had developed in earlier periods. The 1.7-percent rise in retail costs of family living essentials was larger than during the same period of

1943 or 1944. However, there were indications in some fields of lessening pressures, following VE-day.

Retail food prices rose 3.8 percent on the average during the quarter, but in June 1945 they were still 1.3 percent lower than in May 1943, just after the "hold-the-line" order. In primary markets prices for foods rose 2.8 percent and for farm products 2.5 percent. Among other consumer goods, clothing rose 1.2 percent at retail, housefurnishings 0.9 percent, and miscellaneous goods and services 0.3 percent. Rents, and fuel, electricity, and ice were unchanged on the average.

TABLE 2.—Percent of Change in Cost of Living and in Prices of Consumer Goods in Primary Markets in Specified Periods ¹

Commodity group	Percent of change—				
	In last quarter, Mar. 1945 to June 1945	In last year, June 1944 to June 1945	From hold-the-line order, ² May 1943, to June 1945	From OPA's Gen. Max. Price Regulation, May 1942, to June 1945	From month before war in Europe, Aug. 1939, to June 1945
Cost of living					
All items.....	+1.7	+2.9	+3.1	+11.2	+30.8
Food.....	+3.8	+4.0	-1.3	+16.0	+50.9
Clothing.....	+1.2	+5.4	+13.7	+15.2	+45.0
Rent.....	0	+2	+3	-1.5	+3.8
Fuel, electricity, and ice.....	0	+4	+2.2	+4.9	+12.8
Gas and electricity.....	-3	-4	-9	-1.4	-3.8
Other fuels and ice.....	+3	+1.1	+4.9	+10.3	+29.3
Housefurnishings.....	+9	+5.3	+16.5	+19.3	+44.9
Miscellaneous.....	+3	+1.9	+7.5	+11.8	+23.5
Consumer goods (primary-market prices)					
Farm products.....	+2.5	+4.3	+3.7	+24.9	+113.8
Foods.....	+2.8	+9	-2.7	+8.7	+60.0
Hides and leather products.....	+2	+1.4	+2	-7	+27.3
Textile products.....	-1	+1.8	+2.3	+1.6	+46.9
Housefurnishings.....	0	+2	+1.8	+1.6	+22.1

¹ In comparing retail and primary-market price movements the following differences between the cost of living and primary-market price indexes must be noted: The cost-of-living index includes only selected goods and services purchased by wage earners and clerical workers, and reflects the effect of disappearance of lower-priced articles. The primary-market indexes represent all commodities, and are based on goods with unchanged specifications.

² The President's hold-the-line order was issued April 8, 1943. The peak of the price rise which had led to this order was reached in May, which is, therefore, used for this comparison.

Problems involved in preventing inflation were still serious during this quarter. As the result of continuing war demands and seasonal decreases in food supplies, shortages of many civilian goods were as severe as during the first quarter. Because of determined industry opposition, the program for returning low-priced goods to civilian markets was modified in important respects. An increase in wage rates to compensate for the reduction in earnings resulting from loss of overtime was under consideration. Increased ceilings were granted by OPA for some products and others were exempted temporarily from price control. For some, subsidies were increased.

Unlike earlier periods, however, there were prospects of some lessening of the inflationary pressures. Retailers reported consumers to be more quality conscious and less extravagant in their expendi-

tures. Seasonally adjusted retail sales were considerably below the level of the first quarter, reflecting the decline in income payments. Supplies of some goods were not quite so tight. Gasoline rations for civilians were liberalized. Limited amounts of low-priced cotton textiles produced under Government directive and of reconverted goods were reaching retail stores. In June, WPB revoked limitation orders, to permit unlimited production of vacuum cleaners, washing machines, certain commercial electric cooking and food-preparation equipment, and more than 50 other types of commercial and domestic electric appliances. In addition, it was announced that during the third quarter priority assistance would be granted for the production of 350,000 washing machines and 492,627 electric irons. These quantities, however, represent only a fraction of the number needed to satisfy pent-up demand.

FOOD PRICES

Food prices rose 2.8 percent in primary markets and 3.8 percent at retail during the second quarter, accompanied by an increase of 2.5 percent in primary-market prices of farm products. The increases at all levels were the result primarily of both seasonal and contra-seasonal advances for fresh fruits and vegetables and eggs. Primary markets showed declines of 0.2 percent for grains and 1.5 percent for livestock and poultry from seasonal highs in April. Other foods were relatively stable at ceiling levels. Prices for foods and farm products generally were above the levels of the April-June quarter of 1944.

With war requirements remaining large and civilian supplies declining seasonally, shortages of many foods, particularly meats, grew more severe during the quarter. Butchers continued to sell "only to regular customers" and meatless days in restaurants became commonplace. In mid-June 84 percent of independent retail stores in 56 large cities had no pork loins or hams to sell, 85 percent no bacon, over 86 percent no veal, and 73 percent no beef steaks or roasts; for the preceding month the percentages were 78, 68, 70, and 45 percent, respectively.

Livestock and meats.—After rising more than 7 percent from December 1944, livestock and poultry reached a seasonal peak in April 1945, when primary-market prices were 136.4 percent of the 1926 average, the highest level recorded by the Bureau for the war period. A decline of 1.5 percent during May and June followed, reflecting the increased marketing of calves, cows, and sheep. Beef cattle and hogs were still far short of demand, and good-to-choice steers were selling at Chicago for \$17.19 per hundred pounds in June, having risen steadily from \$15.95 in January 1945. Hog trading was maintained rigidly at ceilings, with all grades and weights going for the same price.

Numerous revisions were made throughout the quarter in Government controls, intended to improve meat production and distribution and facilitate price control. As inducements for increased cattle feeding, the previously scheduled reduction in the "over-riding" ceiling on cattle was canceled; a special subsidy payment to livestock feeders of 50 cents per hundred pounds live weight on choice and good grade cattle was established; subsidy payments to slaughterers were increased approximately 25 cents per hundred pounds on the better grades of beef; and a special subsidy adjustment was established to

assure meat packers who operated at a profit during 1938-41 an adequate margin in 1945.

Steps were taken to channel more livestock through plants operating under Federal inspection, which supply all of the Army needs and the majority of the large eastern cities. Non-Federally inspected slaughterers were limited, during May and June, to a percentage of their 1944 slaughter, ranging from 100 percent for sheep and lambs to 75 percent for cattle and calves and 50 percent for hogs. Subsidy payments were limited to these quotas. This was followed in June by an OPA order requiring all slaughterers to distribute available meats to civilians in the same trading areas and in the same proportions as during the first quarter of 1944.

Little change occurred in wholesale or retail prices of all meats despite the scarcity, because of rigid ceiling controls. Poultry prices, however, increased seasonally at wholesale in April and May, and declined in June as permitted under OPA regulations. In May a trucking allowance of 1 cent per pound was added to the ceiling, and effective dates of the monthly storage allowances were staggered to permit three business days between the effective date of the new ceiling on live poultry prices and the revised ceiling on dressed poultry. Retail prices of roasting chickens in large cities continued the rise begun in August 1944, and in June 1945 were selling for 47.3 cents per pound, the highest price recorded by the Bureau since April 1920.

Fruits and vegetables.—Fruits and vegetables as a group rose 8 percent at the wholesale level and 11 percent at retail because of seasonal and contraseasonal price increases among fresh fruits and vegetables. Canned and dried fruits and vegetables were stable at ceilings during the second quarter of 1945, and canners were assured that ceilings on new packs would cover increased production costs. Seasonal increases were reported for apples, oranges, carrots, white potatoes, and sweetpotatoes, while cabbage increased contrary to its normal seasonal trend, and the price of onions advanced with the establishment of a "disaster" ceiling necessitated by bad weather during the growing season.

Other products.—Prices of dairy products remained unchanged throughout the quarter except for minor seasonal decreases for fluid milk and cheddar cheese. Milk production was maintained at record levels, but supplies of dairy products for civilians still were curtailed seriously, as allocations for war purposes increased substantially.

Grains and grain products were fairly stable in price throughout the second quarter of 1945 at levels slightly above those of the corresponding period a year ago. An exception was the unusual advance of 12.1 percent between March and June in the cash price of rye, and 18.3 percent for rye flour, both of which are exempt from price control. The increases resulted from speculative activity, stimulated by the shortage of the grain, demand for export purposes, and purchases by distillers who were forbidden to use other grains during the July to September liquor holiday. Wheat prices, fairly stable from April to May, increased in June following an upward revision in the ceiling of $3\frac{1}{2}$ cents per bushel, effective May 30, 1945, in order to reflect parity prices to farmers. They failed to decline seasonally in June, largely because of the strong demand for domestic and overseas use and the low stocks in terminals and mills resulting from a tight transportation situation.

The distribution of short supplies of sugar continued to arouse concern in the food industry and among housewives, following a further reduction of 20 to 25 percent in the basic allotments to industrial users for the second quarter and the expectation of a further cut to about 50 percent of the 1941 use for the third quarter. Allocations for home canning also were reduced and no easing of the shortage was in prospect, because of drought conditions in Cuba and urgent needs abroad.

TEXTILES AND CLOTHING

Retail costs of clothing advanced 1.2 percent during the second quarter, the largest quarterly increase recorded by any major cost-of-living group except food. Most of this increase was caused by further disappearance of lower-priced lines, a problem of chief concern to Government agencies during all of 1945. The Government's general program for relieving the shortage of low-cost goods was relaxed in important respects to meet industry objections. Primary-market prices of textile products declined slightly during the quarter as the result of reduced ceilings for some cotton fabrics, but increases for other cotton textiles were under consideration by OPA to cover the recent wage increase for textile workers.

Primary-market prices of raw wool and of worsted piece goods remained unchanged over the quarter. Military requirements took 60 percent of the total production of woolen and worsted piece goods, and retailers reported that they were not able to secure supplies to replace depleted stocks of men's wool apparel. Tropical-weight wool suits increased in price in several areas and supplies of tall and stout sizes were scarce, as manufacturers concentrated on regular sizes in order to obtain the largest number of suits from the limited yardage of fabrics available.

Raw-cotton prices advanced approximately 4 percent from March to June on reports of lower acreage planted and expected lower yields. Primary-market prices of print-cloth constructions were rolled back 1 cent per pound in April to reduce increases previously granted which were found to be "excessive." For other cotton textiles, pending complete study, OPA permitted adjustable pricing as a result of higher wages authorized by the War Labor Board for textile workers in northern and southern mills.

Some low-priced articles of cotton apparel, produced under Government directives and preticketed with retail ceilings by manufacturers, reached retail stores during the quarter, but supplies were so limited that they usually were sold out the same day they were put on sale. Among the articles produced were men's shorts and business shirts, boys' dress shirts, men's pajamas, women's housedresses, and girls' dresses and slips. Girls' dresses were reported as reaching retailers in greatest quantity under the program, but supplies of these were not sufficient to meet demand. Some retailers reported that the dresses made under the program were of better quality than other dresses in stock which were selling at higher prices.

Prices of shoes remained unchanged during the quarter. WPB lifted style restrictions and permitted the production of fancy styles. The leather supply picture improved as the quantity of kipskins and cattle hides available for civilian uses increased. There were rumors in the industry that shoe rationing would be abandoned before the end

of 1945 because of the anticipated cut in military requirements. However, the Price Administrator stated that shoe rationing would continue for some time.

Although further steps were taken during the quarter under the comprehensive WPB-OPA program to roll back clothing prices 6 to 7 percent and restore low-priced essential civilian goods to the market, many of these restrictions have been relaxed or postponed because of vigorous industry opposition. Maximum average price orders, requiring manufacturers to allocate production, beginning July 1, among their various price lines to achieve the same average price as in specified base periods, were issued by OPA during the quarter for clothing and clothing accessories, rayon fabrics, and other synthetic grey goods, and woolen apparel fabrics, but these orders were relaxed in important respects after the close of the quarter.

Minor price changes, both upward and downward, were reported as retailers adjusted their prices under Maximum Price Regulation 580, which froze retail margins in effect on March 19, 1945. No major changes were reported, however, since spring and summer lines of merchandise had already been priced at mark-ups approximating those in March, base date of the order. Full effects of the regulation were not expected to be felt until fall and winter lines of merchandise appeared in stores.

HOUSEFURNISHINGS

Retail costs of housefurnishings advanced 0.9 percent but scarcities in the durable-goods field continued to overshadow price changes. Dining-room furniture and wool floor coverings in all price brackets were in short supply, but retailers in several cities reported that supplies of living-room and bedroom furniture and stoves were not so short as during past months. Inventories remained at a low level, however, as most goods continued to reach retailers on an allotment basis. Many retailers were able to obtain supplies of upholstered living-room furniture only by furnishing manufacturers with covering material. There appeared to be some indication of better workmanship and finish in bedroom and dining-room suites and upholstered furniture reaching the retailers.

Price changes were scattered and irregular during the 3-month period, but the net movement was upward. The cost of wool floor coverings rose 1.1 percent, bedroom suites 0.4 percent, and living-room suites 1.4 percent. The disappearance of lower-priced articles continued to be the chief factor in price increases. However, there were some indications by June that shortages of lower price lines of furniture, especially bedroom suites, were becoming less acute.

MPR 580, which became effective May 4, resulted in a number of price adjustments, with decreases reported twice as numerous as increases in June. Price adjustments are expected to be more numerous in the durable-goods field than in soft lines, since furniture lends itself to pricing in brackets of \$5 and \$10.

Continued shortages of textiles and lumber, combined with a critical shortage of manpower, held furniture production at low levels. For the most part those factories which had reconverted to civilian production were producing standard items rather than new numbers in order to fill the backlog of orders as soon as possible.

Sheet-steel ice refrigerators authorized by WPB did not reach retailers in sizable quantities during the quarter. The lack of sheet

steel hindered production and the prospect of mechanical refrigerators in the not-too-distant future had a deterrent effect on both retailer and consuming buying.

FUELS AND UTILITIES

Price advances for both anthracite and bituminous coal and for coke were permitted during the quarter, to cover increased production costs. These increases raised anthracite and bituminous coal prices from 2 to 3 percent at the primary-market level and bituminous coal slightly less than 2 percent at retail.

On May 1 bituminous-coal producers were permitted by OPA to increase prices an average of 16 cents per ton to cover higher labor costs resulting from wage adjustments in contracts between mine workers and operators. These contracts raised costs an estimated 21 cents per ton, 5 cents of which was absorbed by the operators.

Manpower shortages continued to restrict output of bituminous coal during the quarter, and in July the Solid Fuels Administrator estimated a probable deficit of 25,000,000 tons of soft coal during the year beginning April 1, 1945, a forecast of the most serious shortage since the beginning of the war. Restrictions on stocks were eased and industrial consumers were urged to stock-pile coal during the summer. Efforts also were made to increase consumption of lower grades.

Anthracite prices were raised an average of 75 cents per ton, effective June 18—61 cents to cover higher labor costs resulting from wage adjustments in new labor contracts and 14 cents to restore profit margins in the industry. The largest increases were on the important domestic sizes which were raised \$1 a ton. Lesser advances were allowed on the smaller sizes generally used for industrial and commercial purposes. These increases were effective at all levels of distribution, but were not reflected in the cost-of-living index for the quarter since they occurred after the June collection of retail prices.

Mainly as the result of strikes, anthracite production in May was some 3,000,000 tons below the level of May 1944. Manpower shortages continued to handicap production.

Higher prices for bituminous coal, the major raw material, necessitated an increase of approximately 7 percent in beehive-coke prices. On May 26 Connellsville furnace-coke prices were raised from 25 to 50 cents per ton, with the bulk of production receiving the 50-cent increase.

COSTS OF RENTAL HOUSING

Residential rents in large cities remained unchanged on the average during the second quarter of 1945. Fractional changes in rents were reported in 16 of 22 cities surveyed, with increases in 10 cities and decreases in 7. Scranton, a city of relatively high vacancy rates, where there has been a general downward trend in rents since March 1942, reported an increase of 0.6 percent following the usual changes in tenancy on May 1. In part the increase was an indirect reflection of higher prices for coal and higher wages for coal miners, the city's main economic group. The change in Scranton, where rents are not under Federal control, is comparable to changes in recent periods in small cities where formal rent control is not operative. Slight de-

creases in rents occurred both in Portland, Maine, and Portland, Oreg., where substantial changes in employment were anticipated with the approaching reduction of shipbuilding operations. Rent changes in other cities generally accompanied a change of tenant, and frequently were the result of changes in facilities without compensating changes in the rental price.

Cut-backs in employment in war production centers did not affect the housing market appreciably during the quarter. Sales of rented houses continued at a high level in most areas. In many cases tenants were forced to buy at inflated prices in order to have a place to live, with the result that monthly mortgage payments exceeded maximum legal rentals formerly paid. Reports continued to be received, during the quarter, of evicted tenants forced to live in hotels and to take time off from work to look for housing accommodations. In Savannah, Ga., however, where shipyards had released several thousand workers, the rate of sale of rented dwellings dropped. Relaxation of restrictions of residential building during the quarter had little effect on the housing situation since continued shortage of materials hampered construction.

General acceptance of lower standards of maintenance and repair was evident. In some instances tenants were reported as afraid to complain to the landlord for fear of eviction.

MISCELLANEOUS CONSUMER GOODS AND SERVICES

The retail cost of services rose 0.3 percent from March to June 1945. The upward trend was caused by small but general increases in the cost of medical care, newspapers, men's haircuts, and laundry services. Prices of drug prescriptions continued to increase slightly, as a result of the higher cost of ingredients.

A shortage of soap and of collapsible lead tubes was becoming apparent by the end of the quarter. In several retail outlets, shaving cream and tooth paste have been replaced by brushless cream in jars and by tooth powder. In some cities, retailers limited sales of soap to one cake per customer.

Prices of Industrial Goods

As a result of VE-day, the second quarter of 1945 was a period of stocktaking for most basic industries, with little indication of new trends. Price increases during the quarter were important in some fields, but they were largely the culmination of influences which had been in operation for many months. Many Government controls over production and distribution were relaxed, but price regulations for industrial goods were maintained on approximately the same basis as in earlier months.

On May 23, new ceiling prices were established for a wide range of carbon-steel products and steel-mill manufactures. Some of these replaced the interim increases which had been granted earlier in the year, while for other products this was the first increase since the beginning of price control. Nonintegrated-steel producers requested additional adjustments to cover higher wage and operating costs, and these were under consideration at the end of June. Prices for Douglas fir were raised by OPA to encourage increased production, and brick prices continued to advance in local areas.

TABLE 3.—Percent of Change in Prices of Industrial Goods in Primary Markets, in Specified Periods

Commodity group	Percent of change —				
	In last quarter, Mar. 1945 to June 1945	In last year, June 1944 to June 1945	From hold-the-line order, ¹ May 1943, to June 1945	From OPA's Gen. Max. Price Regulation, May 1942, to June 1945	From month before war in Europe, Aug. 1939, to June 1945
Fuel and lighting materials.....	+0.6	+0.7	+3.8	+7.6	+15.6
Metals and metal products.....	+5	+1.0	+9	+8	+12.3
Building materials.....	+3	+1.3	+6.2	+6.6	+31.0
Chemicals and allied products.....	+1	-.3	+2	-1.6	+28.0
Miscellaneous commodities.....	+2	+1.4	+3.2	+4.8	+29.3

¹ The President's hold-the-line order was issued Apr. 8, 1943. The peak of the price rise which had led to this order was reached in May, which is, therefore, used for this comparison.

The War Production Board during the quarter removed a substantial proportion of its controls over use of materials, but with continued short supplies of goods most of the changes were not reflected in the market. The removal of restrictions on the use of aluminum and magnesium, the proposed "open-ending" of the Controlled Materials Plan on July 1, 1945, and the liberalization of building restrictions were not expected to affect the market appreciably until the latter part of the year.

Automobile production again was permitted in limited volume, to begin in July, but reconversion problems were expected to limit production during 1945. Volume production was not expected to be reached until 1946, with "walk-in" demand not satisfied for 2 years or more.

METALS AND MACHINERY

Further advances in prices of iron and steel products, and slight increases in prices of farm machinery raised the general level of prices of metals and metal products approximately 0.5 percent during the second quarter. Mercury prices declined about 9 percent, but prices of nonferrous metals as a group remained unchanged during the period. The automobile industry was given permission by WPB to build approximately 200,000 passenger cars beginning in July 1945. At the same time, the agency laid the groundwork for speedy reconversion of a large segment of the economy through revocation of a number of limitation orders in the machinery industries, and OPA announced its general policy of establishing maximum prices for reconverted goods at 1942 levels with some adjustments. Dissatisfaction with this policy was particularly strong in the automobile industry.

Effective May 23, 1945, OPA allowed increases ranging from \$2 to \$7 a ton in the mill prices for 14 basic carbon-steel products. On hot-rolled carbon plates and sheets, on galvanized sheets, roofing and siding, on nails and staples, and on rails, the advances replaced the interim increases granted during January of this year. In addition, higher prices were authorized for blooms, billets, slabs, and sheet bar; tube rounds and billets; tie plates; hot-rolled bars and bar-size shapes; hot-rolled wire rods; manufacturers' wire and merchant-quality wire; barbless and barbed wire; bale ties; and track spikes. These in-

creases, the first since 1941, were designed to permit steel companies to recover some of the increases in production costs since 1941.

Mill operators stated that the increases failed to offset losses being incurred on items which constitute the bulk of normal production. It was claimed that military cut-backs involving shifts from war specialities to peacetime products would eliminate the margin of profit remaining in the industry. Producers were joined in their protest by warehousemen and jobbers who were required to absorb the price increases on most products. Despite cut-backs in military requirements, steel remained in short supply during the quarter, owing to the increase in civilian orders arising out of reconversion.

One of the major parts of the reconversion program was the announcement early in the quarter that the automobile industry would be permitted to resume manufacture of passenger cars beginning July 1. Manufacturers were authorized by WPB to spend 35 million dollars for construction of new plants and 40 million dollars for rehabilitation of tools and equipment. These projects were assigned a high priority rating immediately behind that of military orders. On May 24 the WPB announced that the industry could make 200,000 passenger cars during the second half of the year, if it could obtain the necessary materials. Of the different materials used by the industry those in shortest supply included tin, cadmium, antimony, burlap, cotton linters, and chromic acid. The Board's assignment of production quotas was protested by the three largest companies on the grounds that the relatively high quotas allotted to the smaller manufacturers would give them a competitive advantage.

The supply of machine tools improved during the quarter. Early in the period it appeared that machine tools might become a bottleneck in the reconversion of the automobile and other durable-goods industries. Machine-tool companies, which during 1944 had converted to production of other types of critically needed machines, received large orders in the latter part of 1944 for tools needed for the accelerated munitions program. Completion of a number of subcontracts enabled the industry to increase its shipment of machine tools during the quarter, with the result that the backlog of unfilled orders had been reduced approximately 25 percent by the end of June.

The improved supply position for most metals was reflected in WPB's announcement that the Controlled Materials Plan would be "open ended" for copper, aluminum, and steel as of July 1. In the case of aluminum, producers were permitted to fill unrated orders after the middle of June, and the Aluminum Co. of Canada announced that more than half of the 250 million pounds of pig aluminum contracted for by the Metals Reserve Company in March of this year had been canceled. The arrival of mercury shipments from Spain, together with a slackening of demand, caused prices of that metal to decline about 9 percent during the quarter. Tin and lead remained in short supply. Subsidies on domestic production of lead, zinc, and copper were continued and Congress made their payment mandatory through June 30, 1946.

BUILDING MATERIALS

Primary-market prices of building materials advanced 0.3 percent during the quarter, to the highest level since December 1920. Lumber prices moved up 0.4 percent as higher ceilings were placed on Douglas fir boards and dimension. Clay products were generally higher.

The WPB during the quarter paved the way for the expansion of the construction industry by raising limits for nonpriority construction—residential from \$200 to \$1,000, commercial to \$5,000, industrial to \$25,000. However, the tight supply situation had not yet eased and production of many items, especially lumber, clay products, and paint materials, continued to lag behind demand.

Lumber prices made their largest gains since the fall of 1944 as OPA raised ceilings on Douglas fir boards and dimension, and lowered ceilings for timbers. This action was taken to stimulate production, as requirements for boxing and crating for the Japanese war mounted. It was hoped that production of boards and dimension could be raised to 40 and 25 percent, respectively, of the total fir cut. Lumber production was running far below that of 1944 in both the Southern Pine and Douglas Fir regions, as manpower problems increased and lumber demands continued high. Lumber prices by June 1945 were 72 percent higher than in August 1939.

Controls in the plumbing industry were relaxed during the quarter by the War Production Board, with the removal of restrictions on production of all cast-iron and steel plumbing fixtures. Cast-iron bathtubs, which have not been produced for civilian use for the past 2 years, again will become available as a result of this action. However, WPB still maintained control over the distribution of this commodity. A 2-percent advance moved prices for lavatories up to ceiling for the first time in a year. Some lavatories selling at the higher price were equipped with brass fixtures rather than the cast-iron fixtures used on "victory" equipment. By the end of the quarter, the plumbing industry had recovered from the price drop of late 1944 which had resulted from fear of overstocks of wartime substitute equipment. However, this group of commodities still was selling below the price level of 3 years ago when price control was instituted and industry-wide roll-backs were put into effect.

Building materials prices in June were more than 30 percent higher than when the war broke out in Europe and 6.5 percent above price levels in May 1942 when "across the board" price control went into effect.

CHEMICALS AND ALLIED PRODUCTS

The end of war in Europe caused only minor market changes for chemicals and allied products. Supplies released by reductions in military demand were absorbed by civilian requirements, and stocks of important chemicals remained relatively short. The Bureau's June index of primary-market prices for this major group was 0.1 percent higher than the March 1945 average, as price advances for glycerin and logwood and chestnut extracts more than offset seasonal price declines for potash. Prices in the resale market remained firm, and nominal prices continued to prevail for certain products.

Demand for industrial chemicals showed no evidence of decline. Container and shipping difficulties, manpower shortages, and continued military demand have kept inventories low. On the other hand, supplies of certain chemicals, such as hydrofluoric acid, and acetone, were reported to be larger. Reductions in military and lend-lease requirements for ethyl alcohol permitted another "liquor holiday" to be declared for July and part of August. Improved supplies permitted the lifting, on June 15, of some restrictions on the use of carbon black in tires, tubes, and other rubber products.

Otherwise, the extensive relaxation of materials controls by WPB affected only a relatively small number of minor chemicals.

Prices of industrial chemicals generally remained unchanged during the quarter. Notable exceptions were the advance of 2 cents per pound in the minimum tank-car quotation for dibutyl phthalate and price reductions by some producers for fermentation butyl alcohol from 17.8 to 17.3 cents per pound and for butyl acetate from 17.25 to 16.94 cents per pound. Ceiling prices for the dyewood extracts, logwood, and fustic were advanced an average of 21.4 and 12.5 percent, respectively, because of increased production costs. Adjustments in individual producers' ceiling prices for chestnut extract, pine tar, pine-tar oil, pine-wood charcoal, and similar chemical wood products were authorized.

Market firmness, with easing in supplies of some articles, was characteristic of the markets for drugs and pharmaceuticals. Some products continued in short supply, however, and the lack of sugar hampered drug producers. Prices for glycerin advanced substantially during the quarter. Refiners offset a production-cost rise in soap manufacture by advancing the price of all grades of glycerin, the byproduct, rather than of soap which was selling at ceiling levels. Quotations on argols and cod-liver oil increased, while prices for certain mercurial drugs declined, reflecting lower quotations for the basic metal. Prices of natural menthol continued to decline, with June spot prices at \$9 per pound, 10 percent below April. Continued Brazilian imports caused futures to be quoted at \$8.75 per pound, duty paid, despite a Brazilian floor of \$8.82 per pound on this material. The presence of large Government stock piles and the expectation that supplies would be available soon from Europe caused market prices for botanicals to weaken.

Increased production of penicillin resulted in a price war, and prices to distributors dropped to 70 cents per 100,000 units in June, compared to \$1.92 on March 15, 1945, when this drug was first sold for retail distribution.

Prices for fertilizer materials, other than potash, remained unchanged during this quarter despite record sales of mixed fertilizer. Potash manufacturers granted their usual seasonal discount of 12 percent, effective June 1.

PAPER AND PULP, AND RUBBER

Higher prices for newsprint, effective March 29, caused the Bureau's index for paper and pulp to advance 0.9 percent during the second quarter to a new high for the war period. Although pulp and paper supplies continued to be relatively short, VE-day brought expectations of a gradual betterment over the remaining months of the year. One reason for optimism was the possibility of a slightly larger supply of wood pulp from domestic and foreign sources. A shipment of 2,000 long tons of Swedish pulp arrived in the United States at the end of June and additional departures from Sweden were reported.

Inclement weather, freight-car shortages, and the ban on the movement of Canadian freight cars into the United States caused pulpwood receipts for the first 5 months of 1945 to be less than those for the similar period of 1944. However, the usual seasonal upswing for pulpwood receipts was more pronounced than in recent years and it was expected that increasing production would carry receipts

and inventories up well beyond the present critical point. Increased receipts of pulpwood from Canadian sources and expanded domestic production of wood pulp resulted in some improvement in wood-pulp inventories before the end of the quarter. WPB also announced the elimination of "segment" allocation by type of paper, except for certain required papers and paperboard, beginning with the third quarter.

During the quarter, wholesale and retail prices of synthetic tires were reduced to the lowest levels since early 1942. Military requirements for the Pacific war and essential civilian needs permitted no diversion of rubber and rubber products to other less-essential uses. Even before VE-day, a lag in the production rate of essential rubber products caused some concern, and unauthorized walk-outs in May and June aggravated the supply problem. Shortages caused scrap-rubber prices to advance 3.5 percent in May, to a level 172 percent above that of August 1939.

Effective April 15, the temporary additions to manufacturers' maximum prices of synthetic passenger-car and motorcycle tires, in effect since May 1, 1944, were reduced from 8.9 percent of the maximum retail prices to 3 percent. Allowable additions for all other tires except farm tractor and implement tires were reduced from 6.5 percent of retail prices to 5 percent. At retail, similar price reductions became effective on May 1, 1945. The new retail ceiling on the most widely used size of passenger-car tire, the 6.00-16, four-ply, became \$15.20, compared to \$16.05 on May 1, 1944, and \$17.11 in 1942. The 1941 retail list was \$14.75 for this size of first-line tire made of natural rubber. The differential on tires of all-rayon construction over cotton construction was reduced from 12½ to 5 percent. Rayon-construction tires at present comprise the total output of large sizes for busses and trucks.



Cost of Living in Large Cities, July 1945

RETAIL prices of living essentials for moderate-income city families increased 0.3 percent during the month ending July 15. Higher prices for clothing, coal, and miscellaneous goods and services, together with seasonally higher prices for eggs, brought the index to the highest level reached during the war. The Bureau of Labor Statistics index of the cost of living for July 1945 was 129.4 percent of the 1935-39 average, and 31 percent above the August 1939 level. During the year the cost of living increased 2.6 percent and by July was 3.4 percent higher than in May 1943, the date that the President's "hold-the-line" order became effective.

The food bill for families of wage earners and lower-salaried workers rose 0.4 percent as the result of higher prices for eggs and some fresh fruits and vegetables. Prices of green beans rose 37 percent at retail, following the removal of OPA ceilings on July 1. Prices of oranges, spinach, and sweetpotatoes rose seasonally. Average prices in the fresh fruits and vegetables group were fractionally lower because of lower prices for potatoes, apples, cabbage, and lettuce. After rising 55 percent between May and June, when OPA retail controls were lifted, cabbage prices fell 27 percent from mid-June to mid-July.

Clothing costs advanced for the twenty-fifth consecutive month and were 0.2 percent higher on July 15 than on June 15. Prices for clothing have increased more than 45 percent since the outbreak of war in Europe, and in July averaged 14 percent higher than in May 1943. Medium and inexpensive cotton apparel—particularly men's business shirts, men's and boys' woven shorts, work clothing, knit undershirts, and women's street dresses—continued to be extremely difficult to buy in July. The retail cost of work clothing again edged upward in many cities as higher prices were reported for overalls and work shirts; decreases were reported, however, in a few cities. Both increases and decreases were due principally to merchants' purchasing of replacement stocks from suppliers other than their former sources. Stores which had not been able to obtain sufficient supplies of white broadcloth shirts made under the WPB-OPA low-cost cotton-apparel program, reported higher prices for men's shirts in mid-July. Tailored rayon slips and rayon wash frocks were available at lower prices in a number of cities, but the average cost of inexpensive rayon knit underwear advanced in nearly one-third of the stores surveyed.

Average prices of housefurnishings available in mid-July were 0.3 percent below those of a month ago, primarily as a result of larger supplies of low-priced bedroom suites. The reintroduction of prewar quality cooking stoves resulted in price increases in six cities and decreases in three others.

Substantial increases in anthracite prices allowed by the OPA at all levels of sale on June 18 resulted in an advance of 1.1 percent in the average cost for fuel, electricity, and ice.

Prices of miscellaneous goods and services were 0.2 percent higher in mid-July than in mid-June. Increased costs for laundry services in three cities and higher prices for auto repairs in another city were the result of adjustments in maximum charges. Charges for haircuts and beauty-shop services were higher in Chicago, Los Angeles, and Washington, and the cost of cigarettes rose 6 percent in Boston as the State tax was increased. Scattered price changes were reported in the prices of cleaning supplies.

Rents were not surveyed in July.

In connection with the tables here given it should be borne in mind that the Bureau of Labor Statistics index indicates average changes in retail prices of selected goods, rents, and services, bought by families of wage earners and lower-salaried workers in large cities. The items covered represented 70 percent of the expenditures of families which had incomes ranging from \$1,250 to \$2,000 in 1934-36. The index does not show the full wartime effect on the cost of living of such factors as lowered quality, disappearance of low-priced goods, and forced changes in housing and eating away from home. It does not measure changes in *total* "living costs"—that is, *in the total amount families spend for living*. Income taxes and bond subscriptions are not included.

The indexes in the accompanying tables are based on time-to-time changes in the cost of goods and services purchased by wage earners and lower-salaried workers in large cities. They do not indicate whether it costs more to live in one city than in another. The data relate to the 15th of each month, except those for January 1941, in tables 1 and 2. For that month they were estimated for January 1 (the date used in the "Little Steel" wage formula of the National

War Labor Board), by assuming an even rate of change from December 15, 1940, to the next pricing date. The President's "hold-the-line" order was issued April 8, 1943. The peak of the rise which led to that order was reached in May, which is, therefore, used for this comparison.

Food prices are collected monthly in 56 cities during the first four days of the week which includes the Tuesday nearest the 15th of the month. Aggregate costs of foods in each city, weighted to represent food purchases of families of wage earners and lower-salaried workers, have been combined for the United States with the use of population weights. In March 1943, the number of cities included in the food index was increased from 51 to 56, and the number of foods from 54 to 61. Prices of clothing, housefurnishings, and miscellaneous goods and services are obtained in 34 large cities in March, June, September, and December. In intervening months, prices are collected in 21 of the 34 cities for a shorter list of goods and services. Rents are surveyed semiannually in most of the 34 cities (in March and September, or in June and December). In computing the all-items indexes for individual cities and the rent index for the average of large cities, because of the general stability of average rents at the present time, the indexes are held constant in cities not surveyed during the current quarter. Prices for fuel, electricity, and ice are collected monthly in 34 large cities.

TABLE 1.—Cost of Living in Large Cities as of July 1945 and Earlier Months

Group	July 1945	June 1945	July 1944	May 1943	May 1942	Jan. 1941	Aug. 1939
	This month	Last month	Last year	Hold-the-line order	Gen. Max. Price Reg.	"Little Steel" decision	Month before war in Europe
Indexes (1935-39=100)							
All items.....	129.4	129.0	126.1	125.1	116.0	100.8	98.6
Food.....	141.7	141.1	137.4	143.0	121.6	97.6	93.5
Clothing.....	145.7	145.4	138.3	127.9	126.2	101.2	100.3
Rent.....	108.3	108.2	108.0	109.9	109.9	105.0	104.3
Fuel, electricity, and ice.....	111.2	110.0	109.7	107.6	104.9	100.8	97.5
Gas and electricity.....	95.2	95.2	95.9	96.1	96.6	97.5	99.0
Other fuels and ice.....	126.7	124.5	123.2	118.7	112.9	104.0	96.3
Housefurnishings.....	145.3	145.8	138.7	125.1	122.2	100.2	100.6
Miscellaneous.....	124.2	124.0	122.0	115.3	110.9	101.8	100.4
Percent of change to July 1945							
All items.....		+0.3	+2.6	+3.4	+11.6	+28.4	+31.2
Food.....		+ .4	+3.1	— .9	+16.5	+45.2	+51.6
Clothing.....		+ .2	+5.4	+13.9	+15.5	+44.0	+45.3
Rent ¹			+ .1	+ .3	—1.5	+3.1	+3.8
Fuel, electricity, and ice.....		+1.1	+1.4	+3.3	+6.0	+10.3	+14.1
Gas and electricity.....		0	— .7	— .9	—1.4	—2.4	—3.8
Other fuels and ice.....		+1.8	+2.8	+6.7	+12.2	+21.8	+31.6
Housefurnishings.....		— .3	+4.8	+16.1	+18.9	+45.0	+44.4
Miscellaneous.....		+ .2	+1.8	+7.7	+12.0	+22.0	+23.7

¹ Percent of change to June 1945.

TABLE 2.—Percent of Change in Cost of Living From Specified Dates to July 1945, by Cities

City	Percent of change, July 1945 compared with—					
	June 1945	July 1944	May 1943	May 1942	Jan. 1941	Aug. 1939
	Last month	Last year	Hold-the-line order	Gen. Max. Price Reg.	"Little Steel" decision	Month before war in Europe
Average.....	+0.3	+2.6	+3.4	+11.6	+28.4	+31.2
Baltimore, Md.....	0	+3.6	+3.7	+12.4	+32.0	+34.7
Birmingham, Ala.....	+1.0	+2.6	+6.1	+12.5	+31.4	+35.5
Boston, Mass.....	+2	+2.8	+2.9	+10.9	+26.9	+29.6
Buffalo, N. Y.....	-2	+2.1	+3	+7.2	+26.8	+31.2
Chicago, Ill.....	+2	+1.7	+3.1	+10.2	+26.9	+30.1
Cincinnati, Ohio.....	+1	+1.9	+4.6	+11.7	+30.0	+33.1
Cleveland, Ohio.....	-2	+1.2	+3.2	+11	+29.5	+32.1
Denver, Colo.....	-5	+1.3	+2.7	+10.5	+27.7	+29.5
Detroit, Mich.....	-1	+2.2	+2.7	+10.0	+29.4	+32.7
Houston, Tex.....	+6	+2.5	+2.4	+9.6	+24.9	+26.5
Kansas City, Mo.....	+2	+2.6	+4.0	+11.7	+29.5	+29.2
Los Angeles, Calif.....	+1	+3.2	+3.8	+10.6	+27.4	+30.0
Minneapolis, Minn.....	+2	+1.5	+2.5	+7.8	+22.7	+25.3
New York, N. Y.....	+7	+3.2	+5.2	+15.3	+29.3	+31.9
Philadelphia, Pa.....	+4	+2.7	+2.8	+11.9	+29.3	+31.2
Pittsburgh, Pa.....	+2	+3.0	+4.6	+12.9	+29.2	+32.8
St. Louis, Mo.....	-4	+1.0	+2.3	+9.8	+25.6	+29.4
San Francisco, Calif.....	+7	+3.3	+4.3	+13.6	+31.2	+34.5
Savannah, Ga.....	+1.0	+2.2	+4.4	+13.9	+35.8	+38.7
Seattle, Wash.....	+5	+2.4	+2.4	+9.4	+29.9	+32.2
Washington, D. C.....	+2	+3.6	+4.1	+12.3	+28.9	+30.6

TABLE 3.—Percent of Change in Cost of Living, June to July 1945, by Cities

City	Percent of change, June to July 1945, in cost of—					
	All items	Food	Clothing	Fuel, electricity, and ice	Housefurnishings	Miscellaneous
Average.....	+0.3	+0.4	+0.2	+1.1	+0.3	+0.2
Atlanta, Ga.....		+1.1		0		
Baltimore, Md.....	0	-7	+7	+2.8	-5	+1
Birmingham, Ala.....	+1.0	+2.2	0	0	0	+3
Boston, Mass.....	+2	-1	+3	+1.4	0	+6
Buffalo, N. Y.....	-2	-9	+1	+1.9	+2.3	0
Chicago, Ill.....	+2	+4	+2	+5	-1.5	0
Cincinnati, Ohio.....	+1	+1	0	0	+1	0
Cleveland, Ohio.....	-2	-4	0	0	+5	0
Denver, Colo.....	-5	-1.5	+2	0	+2.3	+1
Detroit, Mich.....	-1	-6	+1.2	+5	-1	0
Houston, Tex.....	+6	+1.5	-4	0	0	+2
Indianapolis, Ind.....		-4		0		
Jacksonville, Fla.....		+3.3		0		
Kansas City, Mo.....	+2	+4	+1	+9	0	-1
Los Angeles, Calif.....	+1	+3	-1	0	-2.3	+2
Manchester, N. H.....		0		+7		
Memphis, Tenn.....		+6		+3		
Milwaukee, Wis.....		-3		+8		
Minneapolis, Minn.....	+2	+5	+2	+3	0	0
Mobile, Ala.....		+3.6		0		
New Orleans, La.....		+3.4		+2.8		
New York, N. Y.....	+7	+1.2	+4	+1.3	+2	+2
Norfolk, Va.....		+1.3		+1		
Philadelphia, Pa.....	+4	+3	+5	+3.4	-1.0	0
Pittsburgh, Pa.....	+2	+8	-1	-1	-3.0	-2
Portland, Maine.....		+9		+9		
Portland, Oreg.....		+1.5		+3		
Richmond, Va.....		+1.0		+2		
St. Louis, Mo.....	-4	-8	0	+1	0	0
San Francisco, Calif.....	+7	+1.8	-3	+1	+7	0
Savannah, Ga.....	+1.0	+2.3	0	+1	0	0
Scranton, Pa.....		-1.3		+5.9		
Seattle, Wash.....	+5	+1.2	-2	0	0	+1
Washington, D. C.....	+2	+4	+2	+2.0	-1	0

June index revised: 140.6.

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TABLE 4.—Indexes of Cost of Living in Large Cities, 1935 to July 1945

Year and month	Indexes ¹ (1935-39=100) of cost of —						
	All items	Food	Clothing	Rent	Fuel, electricity, and ice	House furnishings	Miscellaneous
1935.....	98.1	100.4	96.8	94.2	100.7	94.8	98.1
1936.....	99.1	101.3	97.6	96.4	100.2	96.3	98.7
1937.....	102.7	105.3	102.8	100.9	100.2	104.3	101.0
1938.....	100.8	97.8	102.2	104.1	99.9	103.3	101.5
1939.....	99.4	95.2	100.5	104.3	99.0	101.3	100.7
1940.....	100.2	96.6	101.7	104.6	99.7	100.5	101.1
1941.....	105.2	105.5	106.3	106.2	102.2	107.3	104.0
1942.....	116.5	123.9	124.2	108.5	105.4	122.2	110.9
1943.....	123.6	138.0	129.7	108.0	107.7	125.6	115.8
1944.....	125.5	136.1	138.8	108.2	109.8	136.4	121.3
Jan. 15.....	124.2	136.1	134.7	108.1	109.5	128.3	118.4
Feb. 15.....	123.8	134.5	135.2	108.1	110.3	128.7	118.7
Mar. 15.....	123.8	134.1	136.7	108.1	109.9	129.0	119.1
Apr. 15.....	124.6	134.6	137.1	108.1	109.9	132.9	120.9
May 15.....	125.1	135.5	137.4	108.1	109.8	135.0	121.3
June 15.....	125.4	135.7	138.0	108.1	109.6	138.4	121.7
July 15.....	126.1	137.4	138.3	108.2	109.7	138.7	122.0
Aug. 15.....	126.4	137.7	139.4	108.2	109.8	139.3	122.3
Sept. 15.....	126.5	137.0	141.4	108.2	109.8	140.7	122.4
Oct. 15.....	126.5	136.4	141.9	(²)	109.8	141.4	122.8
Nov. 15.....	126.6	136.5	142.1	(²)	109.9	141.7	122.9
Dec. 15.....	127.0	137.4	142.8	108.3	109.4	143.0	123.1
1945:							
Jan. 15.....	127.1	137.3	143.0	(²)	109.7	143.6	123.3
Feb. 15.....	126.9	136.5	143.3	(²)	110.0	144.0	123.4
Mar. 15.....	126.8	135.9	143.7	108.3	110.0	144.5	123.6
Apr. 15.....	127.1	136.6	144.1	(²)	109.8	144.9	123.8
May 15.....	128.1	138.8	144.6	(²)	110.0	145.4	123.9
June 15.....	129.0	141.1	145.4	108.3	110.0	145.8	124.0
July 15.....	129.4	141.7	145.7	(²)	111.2	145.3	124.2

¹ Based on changes in cost of goods purchased by wage earners and lower-salaried workers.² Rents not surveyed in this month.

Retail Prices of Food in July 1945

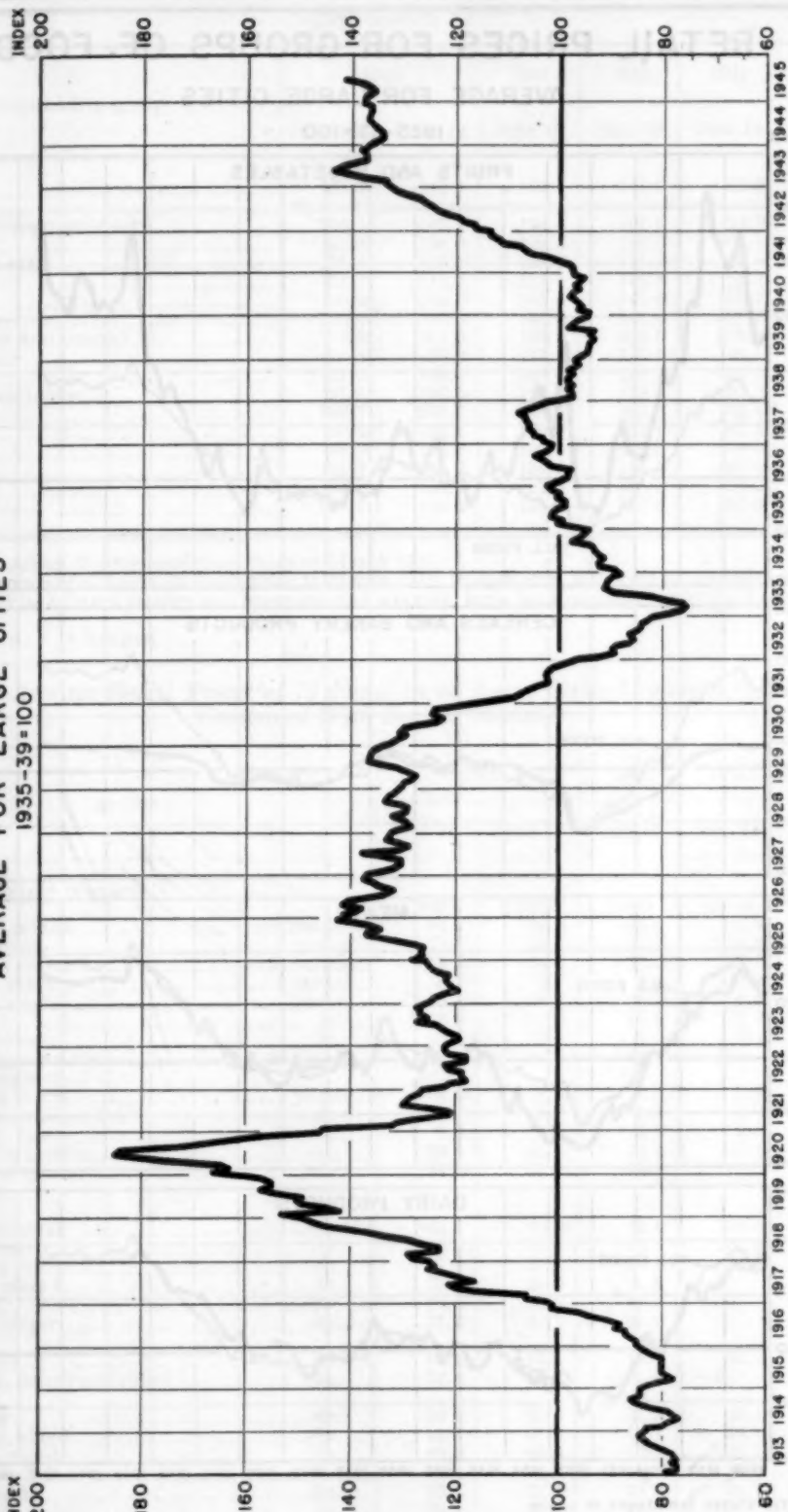
PERCENTAGE changes in retail food costs on July 17, 1945, as compared with costs in the previous month and in July 1944, are shown in table 1.

TABLE 1.—Percent of Change in Retail Costs of Food in 56 Large Cities Combined,¹ by Commodity Groups, in Specified Periods

Commodity group	June 12, 1945, to July 17, 1945	July 18, 1944, to July 17, 1945	May 18, 1943, to July 17, 1945	Jan. 14, 1941, to July 17, 1945	Aug. 15, 1939, to July 17, 1945
All foods.....	+0.4	+3.1	-0.9	+44.9	+51.6
Cereals and bakery products.....	0	+5	+1.4	+15.0	+16.8
Meats.....	0	+1.8	-4.8	+30.2	+37.5
Beef and veal.....	0	-2	-9.7	+8.3	+19.0
Pork.....	+1	+5	-10.2	+30.9	+28.1
Lamb.....	0	+7	-4.0	+37.8	+37.7
Chickens.....	-4	+3.2	+5.8	+60.7	+65.1
Fish, fresh and canned.....	+8	+10.0	+8.4	+83.1	+118.2
Dairy products.....	0	-1	-2.6	+26.9	+43.3
Eggs.....	+8.3	+5.6	+10.6	+61.4	+73.3
Fruits and vegetables.....	-4	+8.4	+5	+105.6	+107.6
Fresh.....	-5	+9.7	+4	+121.3	+122.7
Canned.....	+1	+9	-7	+42.5	+42.1
Dried.....	+1	+2.6	+6.9	+69.6	+87.0
Beverages.....	0	+3	+2	+37.2	+31.4
Fats and oils.....	+1	+9	-1.8	+54.4	+46.7
Sugar and sweets.....	+1	-1	-9	+32.7	+32.3

¹ The number of cities included in the index was changed from 51 to 56 in March 1943, with the necessary adjustments for maintaining comparability. At the same time the number of foods in the index was increased from 54 to 61.

RETAIL PRICES OF FOOD TO CITY WORKERS
AVERAGE FOR LARGE CITIES
1935-39=100



UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

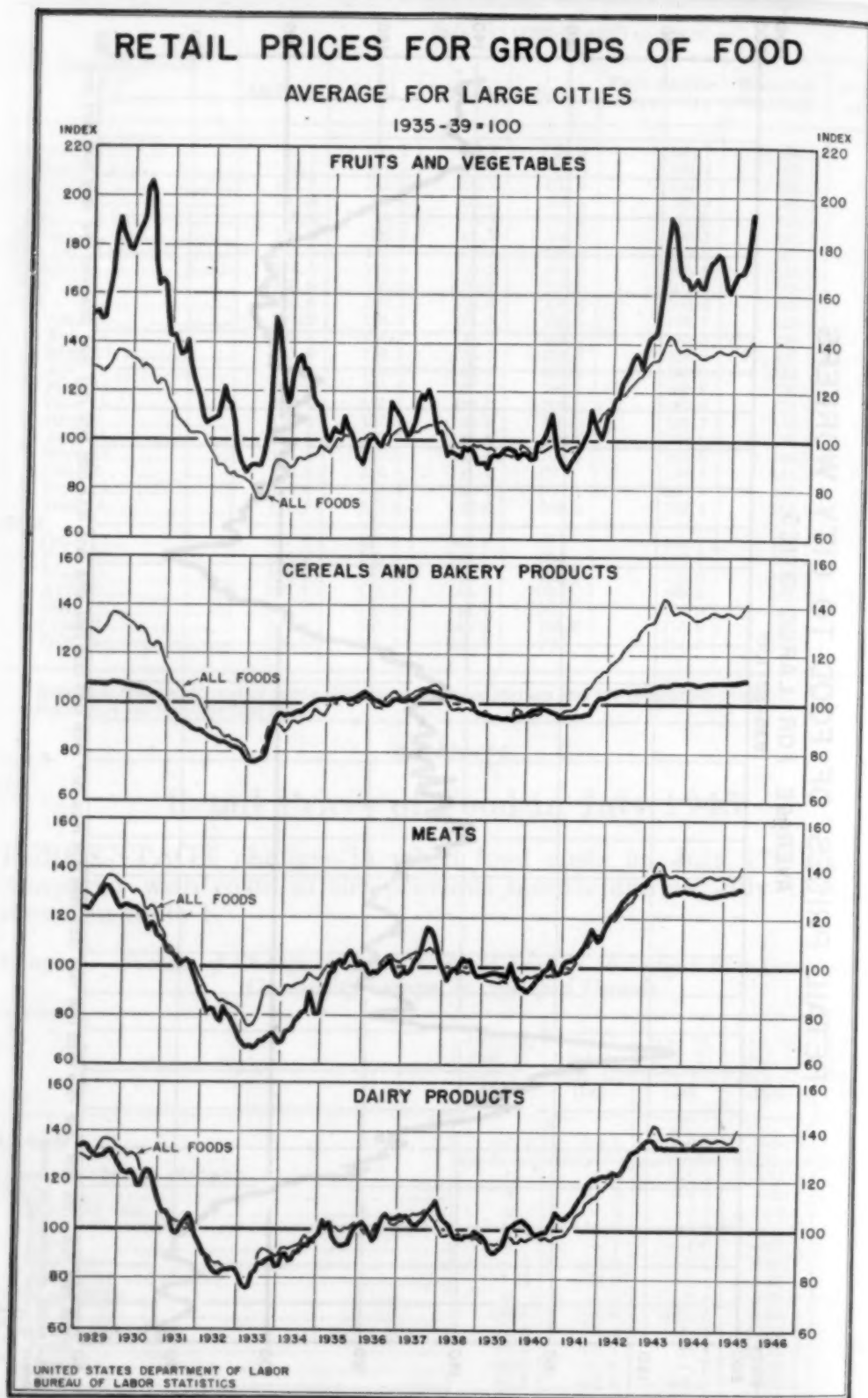


TABLE 2.—*Indexes of Retail Costs of Food in 56¹ Large Cities Combined,² by Commodity Groups, on Specified Dates*

[1935-39=100]

Commodity group	1945		1944	1943	1941	1939
	July 17 ³	June 12	July 18	May 18	Jan. 14	Aug. 15
All foods.....	141.7	141.1	137.4	143.0	97.8	93.5
Cereals and bakery products.....	109.1	109.1	108.6	107.6	94.9	93.4
Meats.....	131.6	131.6	129.3	138.3	101.1	95.7
Beef and veal.....	118.5	118.5	118.7	131.2	109.4	99.6
Pork.....	112.7	112.6	112.1	125.5	86.1	88.0
Lamb.....	136.0	136.0	135.0	141.6	98.7	98.8
Chickens.....	156.2	156.8	151.4	147.6	97.2	94.6
Fish, fresh and canned.....	217.3	215.6	197.5	200.5	118.7	99.6
Dairy products.....	133.4	133.4	133.6	136.9	105.1	93.1
Eggs.....	157.2	145.1	148.9	142.1	97.4	90.7
Fruits and vegetables.....	191.8	192.6	176.9	190.8	93.3	92.4
Fresh.....	206.7	207.7	188.4	205.8	93.4	92.8
Canned.....	130.2	130.1	129.0	131.1	91.4	91.6
Dried.....	168.9	168.8	164.6	158.0	99.6	90.3
Beverages.....	124.7	* 124.7	124.3	124.5	90.9	94.9
Fats and oils.....	124.0	123.9	122.9	126.3	80.3	84.5
Sugar and sweets.....	126.5	126.4	126.6	127.6	95.3	95.6

¹ Indexes based on 51 cities combined prior to March 1943.² Aggregate costs of 61 foods (54 foods prior to March 1943) in each city, weighted to represent total purchases by families of wage earners and lower-salaried workers, have been combined with the use of population weights.³ Preliminary. ⁴ Revised.TABLE 3.—*Average Retail Prices of 78 Foods in 56 Large Cities Combined,¹ July 1945, Compared With Earlier Months*

Article	1945		1944	1941	1939
	July 17 ²	June 12	July 18	Jan. 14	Aug. 15
Cereals and bakery products:					
Cereals:	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>
Flour, wheat.....10 pounds..	64.3	64.3	64.8	41.4	35.8
Macaroni.....pound.....	15.7	15.7	15.7	13.8	14.0
Wheat cereal ³28 ounces..	23.3	23.3	23.0	23.5	24.2
Corn flakes.....8 ounces..	6.7	6.7	6.6	7.1	7.0
Corn meal.....pound.....	6.4	6.4	6.3	4.2	4.0
Rice ³do.....	13.0	12.9	12.8	7.9	7.5
Rolled oats.....do.....	10.4	10.4	9.8	7.1	7.1
Flour, pancake ³20 ounces..	12.4	12.3	12.1	(⁴)	(⁴)
Bakery products:					
Bread, white.....pound.....	8.8	8.8	8.8	7.8	7.8
Bread, whole-wheat.....do.....	9.7	9.7	9.7	8.7	8.8
Bread, rye.....do.....	9.9	9.9	9.9	9.0	9.2
Vanilla cookies.....do.....	28.8	28.6	28.4	25.1	(⁴)
Soda crackers.....do.....	18.9	18.9	18.9	15.0	14.8
Meats:					
Beef:					
Round steak.....do.....	40.1	40.0	41.6	38.6	36.4
Rib roast.....do.....	32.3	32.1	33.4	31.5	28.9
Chuck roast.....do.....	27.9	27.6	28.8	25.2	22.5
Stew meat ³do.....	29.4	29.0	31.3	(⁴)	(⁴)
Liver.....do.....	36.6	36.5	37.3	(⁴)	(⁴)
Hamburger.....do.....	27.2	27.2	27.9	(⁴)	(⁴)
Veal:					
Cutlets.....do.....	43.5	43.1	45.1	45.2	42.5
Roast, boned and rolled ³do.....	34.4	34.3	35.0	(⁴)	(⁴)
Pork:					
Chops.....do.....	36.9	36.8	37.3	29.1	30.9
Bacon, sliced.....do.....	41.1	41.0	41.1	30.1	30.4
Ham, sliced.....do.....	49.2	49.0	50.9	45.1	46.4
Ham, whole.....do.....	36.4	34.6	35.5	26.2	27.4
Salt pork.....do.....	22.1	22.1	22.2	16.7	15.4
Liver ³do.....	22.1	22.1	22.0	(⁴)	(⁴)
Sausage ³do.....	38.6	38.4	38.0	(⁴)	(⁴)
Bologna, big ³do.....	33.7	33.8	34.1	(⁴)	(⁴)

See footnotes at end of table.

TABLE 3.—Average Retail Prices of 78 Foods in 56 Large Cities Combined,¹ July 1945, Compared With Earlier Months—Continued

Article	1945		1944	1941	1939
	July 17 ²	June 12	July 18	Jan. 14	Aug. 15
Meats—Continued.					
Lamb:					
Leg.....pound.....	Cents 39.8	Cents 39.6	Cents 40.1	Cents 27.8	Cents 27.6
Rib chops.....do.....	45.2	45.0	45.4	35.0	36.7
Poultry: Roasting chickens.....do.....	47.1	47.3	45.1	31.1	30.9
Fish:					
Fish (fresh, frozen).....do.....	(³)	(³)	(³)	(³)	(³)
Salmon, pink.....16-oz. can.....	23.6	23.6	23.7	15.7	12.8
Salmon, red ⁴do.....	40.2	40.3	41.9	26.4	23.1
Dairy products:					
Butter.....pound.....	49.9	50.0	50.0	38.0	30.7
Cheese.....do.....	35.4	35.2	36.1	27.0	24.7
Milk, fresh (delivered).....quart.....	15.6	15.6	15.6	13.0	12.0
Milk, fresh (store).....do.....	14.5	14.5	14.5	11.9	11.0
Milk, evaporated.....14½-oz. can.....	10.1	10.1	10.0	7.1	6.7
Eggs: Eggs, fresh.....dozen.....	55.3	51.0	52.7	34.9	32.0
Fruits and vegetables:					
Fresh fruits:					
Apples.....pound.....	12.5	12.9	13.6	5.2	4.4
Bananas.....do.....	10.5	10.5	11.2	6.6	6.1
Oranges.....dozen.....	52.7	52.2	50.8	27.3	31.5
Grapefruit ⁵each.....	11.3	11.0	10.1	(⁷)	(⁷)
Fresh vegetables:					
Beans, green.....pound.....	24.0	⁶ 17.5	13.4	14.0	7.2
Cabbage.....do.....	6.6	9.0	4.8	3.4	3.9
Carrots.....bunch.....	9.2	9.2	8.6	6.0	4.6
Lettuce.....head.....	12.3	12.6	10.2	8.4	8.4
Onions.....pound.....	9.3	8.8	7.2	3.6	3.6
Potatoes.....15 pounds.....	81.9	88.7	79.5	29.2	34.4
Spinach.....pound.....	11.9	11.3	10.3	7.3	7.8
Sweet potatoes.....do.....	11.5	10.9	13.5	5.0	5.5
Beets ¹bunch.....	9.0	12.6	7.5	(⁴)	(⁴)
Canned fruits:					
Peaches.....No. 2½ can.....	27.4	27.5	27.7	16.5	17.1
Pineapple.....do.....	26.9	26.9	27.3	20.9	21.0
Grapefruit juice.....No. 2 can.....	14.4	14.4	14.4	(⁷)	(⁷)
Canned vegetables:					
Beans, green.....No. 2 can.....	13.1	13.1	13.1	10.0	10.0
Corn.....do.....	14.8	14.8	14.4	10.7	10.4
Peas.....do.....	13.2	13.3	13.1	13.2	13.6
Tomatoes.....do.....	12.2	12.1	11.9	8.4	8.6
Soup, vegetable ¹11-oz. can.....	13.4	13.4	13.4	(⁴)	(⁴)
Dried fruits: Prunes.....pound.....	17.7	17.7	17.1	9.6	8.8
Dried vegetables:					
Navy beans.....do.....	11.5	11.4	10.7	6.5	5.8
Soup, dehydrated, chicken noodle ¹ounce.....	3.8	3.8	3.7	(⁴)	(⁴)
Beverages:					
Coffee.....pound.....	30.4	30.4	30.0	20.7	22.3
Tea.....¼ pound.....	24.2	24.2	23.9	17.6	17.2
Cocoa ¹½ pound.....	10.4	10.4	10.2	9.1	8.6
Fats and oils:					
Lard.....pound.....	18.7	18.8	18.6	9.3	9.9
Shortening other than lard—					
In cartons.....do.....	20.0	20.0	20.2	11.3	11.7
In other containers.....do.....	24.5	24.5	24.7	18.3	20.2
Salad dressing.....pint.....	24.3	25.3	25.6	20.1	(⁴)
Oleomargarine.....pound.....	23.8	24.0	24.2	15.6	16.5
Peanut butter.....do.....	28.5	28.5	28.4	17.9	17.9
Oil, cooking or salad ¹pint.....	30.4	30.6	30.6	(⁴)	(⁴)
Sugar and sweets:					
Sugar.....pound.....	6.7	6.7	6.8	5.1	5.2
Corn sirup.....24 ounces.....	15.8	15.8	15.8	13.6	13.7
Molasses ¹18 ounces.....	15.8	15.8	15.8	13.4	13.6
Apple butter ¹16 ounces.....	14.1	13.9	13.2	(⁴)	(⁴)

¹ Data are based on 51 cities combined prior to January 1943.² Preliminary.³ Not included in index.⁴ First priced, February 1943.⁵ Not priced.⁶ Composite price not computed.⁷ First priced, October 1941.⁸ Revised.

TABLE 4.—Indexes of Average Retail Costs of All Foods, by Cities,¹ on Specified Dates

[1935-39=100]

City	1945		1944	1941	1939
	July 17 ²	June 12	July 18	Jan. 14	Aug. 15
United States.....	141.7	141.1	137.4	97.8	93.5
Atlanta, Ga.....	142.1	³ 140.6	138.1	94.3	92.5
Baltimore, Md.....	150.4	151.4	143.1	97.9	94.7
Birmingham, Ala.....	146.9	143.7	141.4	96.0	90.7
Boston, Mass.....	136.6	136.8	131.9	95.2	93.5
Bridgeport, Conn.....	138.7	138.5	135.5	96.5	93.2
Buffalo, N. Y.....	138.9	140.2	135.0	100.2	94.5
Butte, Mont.....	138.7	138.0	134.8	98.7	94.1
Cedar Rapids, Iowa ³	145.4	144.6	140.5	95.9	-----
Charleston, S. C.....	139.4	136.5	133.0	95.9	95.1
Chicago, Ill.....	140.7	140.2	138.6	98.2	92.3
Cincinnati, Ohio.....	140.8	140.6	139.2	96.5	90.4
Cleveland, Ohio.....	145.8	146.4	144.6	99.2	93.6
Columbus, Ohio.....	133.4	133.6	129.2	93.4	88.1
Dallas, Tex.....	137.7	135.6	132.3	92.6	91.7
Denver, Colo.....	139.8	142.0	140.6	94.8	92.7
Detroit, Mich.....	138.3	139.2	136.5	97.0	90.6
Fall River, Mass.....	134.8	134.6	132.9	97.5	95.4
Houston, Tex.....	141.6	139.5	137.0	102.6	97.8
Indianapolis, Ind.....	136.8	137.4	134.6	98.2	90.7
Jackson, Miss. ³	149.4	149.0	138.5	105.3	-----
Jacksonville, Fla.....	152.4	147.5	144.8	98.8	95.8
Kansas City, Mo.....	135.0	134.4	132.5	92.4	91.5
Knoxville, Tenn. ³	161.1	159.0	157.3	97.1	-----
Little Rock, Ark.....	141.0	140.3	135.8	95.6	94.0
Los Angeles, Calif.....	145.2	144.8	138.5	101.8	94.6
Louisville, Ky.....	134.3	134.1	133.4	95.5	92.1
Manchester, N. H.....	137.4	137.4	135.3	96.6	94.9
Memphis, Tenn.....	150.7	149.8	146.1	94.2	89.7
Milwaukee, Wis.....	140.6	141.0	137.4	95.9	91.1
Minneapolis, Minn.....	133.7	133.0	131.3	99.0	95.0
Mobile, Ala.....	151.1	145.9	144.4	97.9	95.5
Newark, N. J.....	145.1	145.3	139.2	98.8	95.6
New Haven, Conn.....	139.0	139.9	135.3	95.7	93.7
New Orleans, La.....	157.6	152.4	149.6	101.9	97.6
New York, N. Y.....	143.8	142.1	138.1	99.5	95.8
Norfolk, Va. ⁴	145.3	143.4	143.2	95.8	93.6
Omaha, Nebr.....	133.5	133.5	130.4	97.9	92.3
Peoria, Ill.....	144.8	144.6	140.4	99.0	93.4
Philadelphia, Pa.....	139.2	138.8	134.8	95.0	93.0
Pittsburgh, Pa.....	142.4	141.2	136.7	98.0	92.5
Portland, Maine.....	136.4	135.2	135.1	95.3	95.9
Portland, Oreg.....	152.5	150.3	146.2	101.7	96.1
Providence, R. I.....	141.9	140.7	135.5	96.3	93.7
Richmond, Va.....	137.5	136.1	134.4	93.7	92.2
Rochester, N. Y.....	138.2	138.9	133.8	99.9	92.3
St. Louis, Mo.....	142.9	144.0	141.9	99.2	93.8
St. Paul, Minn.....	132.2	131.9	129.6	98.6	94.3
Salt Lake City, Utah.....	144.8	144.3	141.1	97.5	94.6
San Francisco, Calif.....	150.1	147.5	142.4	99.6	93.8
Savannah, Ga.....	156.6	153.1	152.9	100.5	96.7
Scranton, Pa.....	142.6	144.5	138.6	97.5	92.1
Seattle, Wash.....	145.7	144.0	141.9	101.0	94.5
Springfield, Ill.....	144.7	146.3	144.2	96.2	94.1
Washington, D. C.....	142.2	141.6	134.9	97.7	94.1
Wichita, Kans. ³	150.9	150.0	148.4	97.2	-----
Winston-Salem, N. C. ³	143.1	141.4	136.0	93.7	-----

¹ Aggregate costs of 61 foods in each city (54 foods prior to March 1943) weighted to represent total purchases by wage earners and lower-salaried workers, have been combined for the United States with the use of population weights. Primary use is for time-to-time comparisons rather than place-to-place comparisons.

² Preliminary.

³ June 1940=100.

⁴ Includes Portsmouth and Newport News.

⁵ Revised.

TABLE 5.—*Indexes of Retail Food Costs in 56 Large Cities Combined,¹ 1913 to July 1945*
[1935-39=100]

Year	All-foods index	Year	All-foods index	Year and month	All-foods index	Year and month	All-foods index
1913.....	79.9	1927.....	132.3	1941.....	105.5	1944	
1914.....	81.8	1928.....	130.8	1942.....	123.9	September...	137.0
1915.....	80.9	1929.....	132.5	1943.....	138.0	October.....	136.4
1916.....	90.8	1930.....	126.0	1944.....	136.1	November....	136.5
1917.....	116.9	1931.....	103.9			December....	137.4
1918.....	134.4	1932.....	86.5	1944			
1919.....	149.8	1933.....	84.1	January.....	136.1	1945	
1920.....	168.8	1934.....	93.7	February....	134.5	January.....	137.3
1921.....	128.3	1935.....	100.4	March.....	134.1	February....	136.5
1922.....	119.9	1936.....	101.3	April.....	134.6	March.....	135.9
1923.....	124.0	1937.....	105.3	May.....	135.5	April.....	136.6
1924.....	122.8	1938.....	97.8	June.....	135.7	May.....	138.8
1925.....	132.9	1939.....	95.2	July.....	137.4	June.....	141.1
1926.....	137.4	1940.....	96.6	August.....	137.7	July.....	141.7

¹ Indexes based on 51 cities combined prior to March 1943.

Supplies of Food in Independent Retail Stores, July 1945

THERE was more meat for dinner tables in mid-July than in June or May, according to reports from field representatives of the Bureau of Labor Statistics who interviewed independent retailers in 56 large cities. Butter, margarine, and lard were also available in more stores than in the previous month, but cooking and salad oils and some important canned fruits and vegetables were more difficult to find.

Fresh and prepared meats were in better supply than at any time since April. Beef and lamb were found in two-fifths of the reporting stores; veal and pork in approximately one-fourth; and almost three fourths of the stores had frankfurters and bologna. Stocks of beef and lamb showed the greatest improvement during the month. About 40 percent of the retailers had beef and lamb, as compared with only 25 and 30 percent, respectively, in June. In July 1944 more than 70 percent of the stores had beef, lamb, and pork, and over 60 percent had veal. All sections of the country shared in the general improvement of meat supplies from May to June, except the Southeast where veal, lamb, and pork were still not available in 90 percent of the stores. In the Midwestern and Mountain areas there was less veal and in the Southwest there was less pork. The New England, Middle Atlantic, Midwest and Pacific Coast regions were better supplied with all meats, both fresh and prepared.

Butter was again found in over 90 percent of the stores, and margarine and lard showed some improvement with stocks in about 7 out of every 10 stores. Shortening was still unobtainable in more than a third of the groceries, and cooking and salad oils were less plentiful in all sections except the Midwest and the Pacific coast.

Fewer grocers had canned apricots and canned peaches than in mid-April when they were last included in the survey. Canned peas and tomatoes, with more than 20 percent of the reporting grocers out of stock, were available in fewer stores than in any previous survey period.

Canned asparagus was also seen less often than in mid-June but over 90 percent of the groceries had canned green and wax beans, beets, and tomato juice. There was no shortage of evaporated milk.

More than a fifth of the grocers were still unable to supply their customers with granulated sugar. In the Southeastern States more than half of the reporting stores, and in the Middle Atlantic region and in Region III almost a third, were out of stock; supplies in New England and the States west of the Mississippi were slightly larger.

Independent Retail Stores Without Supplies of Specified Foods on June 12 and July 17, 1945, in 56 Large Cities

Commodity	Percent of stores without supplies of specified foods ¹									
	June 12, 1945— 56 large cities	July 17, 1945								
		56 large cities	Region ²							
			I	II	III	IV	V	VI	VII	VIII
Meats:										
Beef, steaks and roasts.....	73	55	75	48	58	89	64	60	33	21
Beef, all other.....	75	60	78	57	69	90	68	61	43	19
Veal, steaks, chops and roasts.....	86	74	85	70	69	³ 90	68	83	84	60
Veal, all other.....	88	74	86	68	69	³ 90	67	87	³ 90	64
Lamb, chops and roasts.....	71	} ⁴ 57	75	47	68	³ 90	63	71	39	11
Lamb, all other.....	72									
Pork, loins and hams.....	84	79	88	79	76	³ 90	83	78	56	61
Pork, bacon.....	85	³ 77	83	80	75	⁶ 90	74	69	57	71
Frankfurters and bologna.....	41	28	29	40	35	21	14	18	2	6
Fats and oils:										
Butter.....	9	5	14	7	⁷ 0	8	2	⁷ 0	⁷ 0	14
Margarine.....	32	28	59	43	29	12	15	11	⁷ 0	⁷ 0
Shortening.....	35	35	31	46	19	58	29	28	8	15
Lard.....	38	30	11	46	12	44	33	6	11	32
Cooking and salad oils.....	16	27	18	32	27	43	28	19	8	18
Processed foods:										
Tomatoes, canned.....	⁸ 6	28	39	54	10	9	3	9	5	12
Peas, canned.....	16	21	29	38	23	19	3	⁷ 0	⁷ 0	⁷ 0
Beans, green and wax, canned.....	⁹ 1	1	⁷ 0	3	1	⁷ 0	1	⁷ 0	⁷ 0	⁷ 0
Asparagus, canned.....	27	30	21	35	32	34	34	23	7	21
Beets, canned.....	(¹⁰) 7	7	⁷ 0	2	⁷ 0	3	⁷ 0	16	39	38
Peaches, canned.....	⁸ 45	61	63	76	61	62	47	60	2	12
Apricots, canned.....	⁸ 14	31	18	47	59	37	20	3	⁷ 0	⁷ 0
Tomato juice, canned.....	⁸ 2	8	3	2	1	⁷ 0	1	38	2	6
Milk, evaporated, canned.....	1	1	1	⁷ 0	1	2	⁷ 0	⁷ 0	⁷ 0	1
Sugar, granulated.....	21	22	9	30	31	54	16	5	⁷ 0	1

¹ Data are weighted by the number of independent food stores in each city to derive regional and all-region percentages.

² Regions consist of the following cities: *Region I.*—Boston, Bridgeport, Fall River, Manchester, New Haven, Portland, Maine, Providence. *Region II.*—Baltimore, Buffalo, Newark, New York, Philadelphia, Pittsburgh, Rochester, Scranton, Washington, D. C. *Region III.*—Cincinnati, Cleveland, Columbus, Detroit, Indianapolis, Louisville. *Region IV.*—Atlanta, Birmingham, Charleston, S. C., Jackson, Miss., Jacksonville, Knoxville, Memphis, Mobile, Norfolk, Richmond, Savannah, Winston-Salem. *Region V.*—Dallas, Houston, Kansas City, Mo., Little Rock, New Orleans, St. Louis, Wichita. *Region VI.*—Cedar Rapids, Chicago, Milwaukee, Minneapolis, Omaha, Peoria, St. Paul, Springfield, Ill. *Region VII.*—Butte, Denver, Salt Lake City. *Region VIII.*—Los Angeles, Portland, Oreg., San Francisco, Seattle.

³ Over 90 percent out of stock.

⁴ Includes all grades and cuts.

⁵ Revised.

⁶ Revised; over 90 percent out of stock.

⁷ Some size, quality, or variety of the commodity was available in all stores surveyed.

⁸ April 17, 1945, was last date surveyed.

⁹ May 15, 1945, was last date surveyed.

¹⁰ Not included in the survey in this month; the list is changed from time to time.

Gas and Electricity: Price Changes, December 1944 to June 1945

DURING the 6-month period ending June 15, 1945, changes in net monthly bills for quantities of consumption typical of domestic usage of electricity and gas were relatively unimportant. Rates for computing the net monthly bills are collected by the Bureau of Labor Statistics in 51 cities for electricity and in 50 cities for gas.

Prices of Electricity

Domestic rates for electricity during the first half of 1945 decreased in 3 of the 51 cities. These cities were Portland (Maine), Buffalo, and Charleston. The average reduction to customers using up to 250 kilowatt-hours per month was approximately 5 percent in Portland and between 7 and 8 percent in Buffalo. In Charleston, where a decrease was made only to those customers using less than 65 kilowatt-hours, the reduction amounted to nearly 14 percent for the monthly use of 25 kilowatt-hours, with gradually diminished reductions as the consumption increased up to the 65 kilowatt-hour limit.

One company serving a large number of domestic users in Portland, Oreg., allowed a rebate of 20 percent on electric bills for June.

Prices of Gas

Rate reductions for gas occurred in Minneapolis and Atlanta during the first half of 1945. The decrease averaged about 4 percent in Minneapolis for mixed manufactured and natural gas, and about 6.5 percent in Atlanta for natural gas. The rate reduction in Atlanta, effective May 15, 1945, was accompanied by a slight decrease in the heating value of the gas served. One company in New York City made its customary summer reduction in net monthly bills for customers using more than 3,000 cubic feet of manufactured gas per month; the reduction became effective on May 1 and will extend through October 1945.

Adjustments in rates, covering costs of fuel used for manufactured gas, resulted in a reduction between May and June of about 4 percent in Fall River and of less than 1 percent in Portland (Maine) and Manchester.

Changes in the heating value of the gas during the first part of the year resulted in minor increases or decreases in costs for several cities. All amounted to less than 1 percent, except for manufactured gas in one city and for natural gas in four cities. In Savannah a lower B. t. u. for manufactured gas increased the cost about 7 percent. A lower B. t. u. for natural gas in Pittsburgh and Houston, for one of three companies serving each of those cities, increased the cost about 3 percent to their customers. In Atlanta and Mobile the increase was slightly more than 1 percent. This increase in Atlanta occurred prior to the rate reduction in May. Relatively unimportant changes in the heating value of the gas served occurred in several cities during the second quarter of 1945.

Wholesale Prices

Wholesale Prices in July 1945

LOWER prices for a wide range of agricultural commodities caused a decline of 0.2 percent in the Bureau of Labor Statistics index of commodity prices in primary markets¹ from June to July 1945. This was the first decline in the general index since August 1944. At a level of 105.9 percent of the 1926 average, the index was 1.7 percent above the average for July 1944, and 41.2 percent above August 1939.

Average market prices for farm products dropped 1.1 percent and food prices 0.6 percent during July. Group indexes for fuel and lighting materials advanced 0.5 percent, for chemicals and allied products 0.3 percent, and for building materials 0.1 percent. Average prices of hides and leather products, textile products, metals and metal products, housefurnishings, and miscellaneous commodities remained unchanged at the level of the previous month.

The group index for raw materials declined 0.6 percent during the month, and semimanufactured articles decreased 0.1 percent. Average prices for manufactured products remained unchanged.

The drop of 1.1 percent in prices for farm products reflected larger shipments of products to market and uncertainty on the part of buyers. Wheat quotations dropped 2.5 percent, with heavy marketings which caused congestion in some terminals, and barley prices were lower contraseasonally. Market quotations for corn and oats advanced during the month on heavy demand, with relatively light selling. Rye prices rose nearly 4 percent on speculative buying and the announcement that no ceiling would be placed on the 1945 rye crop. Increased marketings lowered prices of calves, cows, and poorer grades of steers, while better quality steers rose fractionally, reflecting higher subsidy payments to slaughterers coupled with an insufficient supply to meet demands. Quotations for lambs and ewes moved downward seasonally. Higher prices for wethers resulted from an improvement in the quality of animals marketed. Live-poultry prices declined in accordance with seasonal adjustments in ceilings. Cotton quotations declined with market uncertainty. Prices for apples, onions, and white potatoes were off, and lemons dropped as the result of a large crop. Primary market prices for oranges fell sharply, reflecting a large crop of smaller sizes. Egg prices advanced seasonally, and sweetpotatoes were higher.

A decrease of more than 3 percent in average prices for fruits and vegetables lowered the group index for foods 0.6 percent during the month. Lower prices were reported for wheat flour following a reduction in the subsidy to millers, and manufacturers' prices of breakfast

¹ The Bureau of Labor Statistics wholesale price data for the most part represent prices prevailing in the "first commercial transaction." They are prices quoted in primary markets, at principal distribution points.

cereals declined. Rye flour was higher, following the market prices for rye. Dressed poultry prices moved downward with seasonal adjustments in ceilings.

Primary market prices for sheepskins continued to advance, reflecting demand for these skins for export and for use in mouton coats.

Average prices for anthracite in July were 4.2 percent above the average for June, under the higher ceiling prices permitted producers by OPA on June 18. Bituminous-coal quotations were fractionally higher. Sales realizations advanced for natural and manufactured gas and were lower for electricity.

A number of adjustments in prices for farm machinery and agricultural implements were reflected in the index during the month. Manufacturers' prices for cultivators, harrows, plows, and a number of agricultural hand tools advanced. These price increases followed ceiling price adjustments permitted individual manufacturers producing new models or resuming full-scale production of models which had not been produced in volume during the war. Prices for harvester-threshers were lower. Except for the continued decline in mercury quotations, prices for nonferrous metals and for iron and steel products remained unchanged.

Average prices for building materials advanced 0.1 percent as the result of price increases for a number of commodities. Common brick prices rose over 1 percent in line with local ceiling adjustments by OPA. Average monthly prices of refractory brick advanced more than 2 percent following an adjustment in ceilings at the end of June, the second such adjustment during 1945. Manufacturers' prices for drain tile also were higher. Southern pine lumber prices increased fractionally, as higher prices were permitted by OPA for sales by mills direct to military users. Butyl acetate prices rose nearly 2 percent with higher production costs, while turpentine quotations dropped as the new crop moved to market. Manufacturers' prices for plaster board increased slightly as producers in some areas were allowed to add actual freight charges to f. o. b. mill prices.

The group index for chemicals and allied products advanced 0.3 percent during July. Average monthly prices for logwood extract rose, following the ceiling increases permitted in June to cover higher import costs. Chestnut extract prices also advanced under ceiling adjustments permitted individual producers. Glycerin, a byproduct of the soap industry, rose in price to cover increased production costs in that industry which could not be absorbed by price increases for soap already at ceiling levels. Potash prices advanced during July, reflecting the seasonal reduction in discounts allowed.

Among commodities included in the miscellaneous group, prices for boxboard liner advanced under ceiling adjustments permitted to cover higher production costs. Other commodities, including automobile tires, cattle feed, soap, and crude rubber, remained unchanged.

Over the 12-month period from July 1944, average prices in primary markets rose 1.7 percent, an increase much smaller than in the early years of the war. A striking element of the price rise during the last year has been its uniformity in different economic areas. Seven of the 10 major groups in the wholesale price index showed increases between 1 and 1.6 percent over the year. This uniformity of increase resulted from the effectiveness of price controls coupled with a growing necessity in many fields of small adjustments to meet higher operating costs. Farm products, with a rise of 3.9 percent during the 12

months, is the only major group of commodities which showed an increase greater than that for all commodities. Housefurnishing goods rose only 0.2 percent, on the average, while the group index for chemicals and allied products declined 0.2 percent. Among the subgroups only two—hides and skins, and brick and tile—showed increases as great as 10 percent. Rises of 5 to 10 percent occurred for livestock and poultry, cotton goods, and anthracite. Average prices for several commodity groups, including leather, leather products, shoes, structural steel, oils and fats, tires and tubes, cattle feed, and crude rubber, have remained unchanged for a year or more.

Over the nearly 6 years since the beginning of war in Europe, average prices for raw materials rose 77 percent, largely as the result of higher prices for agricultural commodities. Group indexes for semimanufactured articles and manufactured products increased 28 percent.

TABLE 1.—*Indexes of Wholesale Prices by Groups and Subgroups of Commodities, July 1945, Compared with June 1945, July 1944, and August 1939*

Groups and subgroups	Indexes (1926=100)				Percent of change to July 1945 from—		
	July 1945	June 1945	July 1944	August 1939	June 1945	July 1944	August 1939
All commodities.....	105.9	106.1	104.1	75.0	-0.2	+1.7	+41.2
Farm products.....	129.0	130.4	124.1	61.0	-1.1	+3.9	+111.5
Grains.....	128.6	130.2	125.2	51.5	-1.2	+2.7	+149.7
Livestock and poultry.....	133.3	134.4	123.4	66.0	-1.8	+8.0	+102.0
Other farm products.....	125.5	127.2	123.2	60.1	-1.3	+1.9	+108.8
Foods.....	106.9	107.5	105.8	67.2	-0.6	+1.0	+59.1
Dairy products.....	110.5	110.5	110.3	67.9	0	+2	+62.7
Cereal products.....	95.3	95.5	94.3	71.9	-2	+1.1	+32.5
Fruits and vegetables.....	130.3	134.7	129.9	58.5	-3.3	+3	+122.7
Meats.....	108.0	108.3	105.9	73.7	-3	+2.0	+46.5
Other foods.....	95.6	95.1	94.7	60.3	+5	+1.0	+58.5
Hides and leather products.....	118.0	118.0	116.2	92.7	0	+1.5	+27.3
Shoes.....	126.3	126.3	126.3	100.8	0	0	+25.3
Hides and skins.....	117.6	117.3	106.8	77.2	+3	+10.1	+52.3
Leather.....	101.3	101.3	101.3	84.0	0	0	+20.6
Other leather products.....	115.2	115.2	115.2	97.1	0	0	+18.6
Textile products.....	99.6	99.6	98.0	68.7	0	+1.6	+45.0
Clothing.....	107.4	107.4	107.0	81.5	0	+4	+31.8
Cotton goods.....	119.7	119.7	114.0	65.5	0	+5.0	+82.7
Hosiery and underwear.....	71.5	71.5	70.6	61.5	0	+1.3	+16.3
Rayon.....	30.2	30.2	30.3	28.5	0	-3	+6.0
Silk.....				44.3			
Woolen and worsted goods.....	112.7	112.7	112.9	75.5	0	-2	+49.3
Other textile products.....	100.9	100.9	100.5	63.7	0	+4	+58.4
Fuel and lighting materials.....	84.3	83.9	83.2	72.6	+5	+1.3	+16.1
Anthracite.....	101.6	97.5	95.4	72.1	+4.2	+6.5	+40.9
Bituminous coal.....	123.9	123.8	120.5	96.0	+1	+2.8	+29.1
Coke.....	131.0	131.0	130.7	104.2	0	+2	+25.7
Electricity.....	(1)	(1)		75.8			
Gas.....	(1)	78.0		86.7			
Petroleum and products.....	64.2	64.2	64.0	51.7	0	+3	+24.2
Metals and metal products.....	104.7	104.7	103.7	93.2	0	+1.0	+12.3
Agricultural implements.....	97.7	97.6	97.3	93.5	+1	+4	+4.5
Farm machinery.....	98.7	98.7	98.4	94.7	0	+3	+4.2
Iron and steel.....	99.1	99.1	97.1	95.1	0	+2.1	+4.2
Motor vehicles.....	112.8	112.8	112.8	92.5	0	0	+21.9
Nonferrous metals.....	85.9	85.9	85.7	74.6	0	+2	+15.1
Plumbing and heating.....	92.6	92.6	92.4	79.3	0	+2	+16.8
Building materials.....	117.5	117.4	115.9	89.6	+1	+1.4	+31.1
Brick and tile.....	111.7	110.9	100.7	90.5	+7	+10.9	+23.4
Cement.....	99.4	99.4	96.4	91.3	0	+3.1	+8.9
Lumber.....	155.1	154.9	154.8	90.1	+1	+2	+72.1
Paint and paint materials.....	106.1	106.3	105.5	82.1	-2	+6	+29.2
Plumbing and heating.....	92.6	92.6	92.4	79.3	0	+2	+16.8
Structural steel.....	107.3	107.3	107.3	107.3	0	0	0
Other building materials.....	104.3	104.3	103.1	89.5	0	+1.2	+16.5

¹ No quotation.

TABLE 1.—*Indexes of Wholesale Prices by Groups and Subgroups of Commodities, July 1945, Compared with June 1945, July 1944, and August 1939—Continued*

Groups and subgroups	Indexes (1926=100)				Percent of change to July 1945 from—		
	July 1945	June 1945	July 1944	August 1939	June 1945	July 1944	August 1939
Chemicals and allied products.....	95.3	95.0	95.5	74.2	+0.3	-0.2	+28.4
Chemicals.....	96.1	95.9	96.2	83.8	+2	-1	+14.7
Drugs and pharmaceuticals.....	110.2	109.5	112.0	77.1	+6	-1.6	+42.9
Fertilizer materials.....	81.1	80.4	81.1	65.5	+9	0	+23.8
Mixed fertilizers.....	86.6	86.6	86.3	73.1	0	+3	+18.5
Oils and fats.....	102.0	102.0	102.0	40.6	0	0	+151.2
Housefurnishing goods.....	104.5	104.5	104.3	85.6	0	+2	+22.1
Furnishings.....	107.5	107.5	107.2	90.0	0	+3	+19.4
Furniture.....	101.5	101.5	101.4	81.1	0	+1	+25.2
Miscellaneous.....	94.8	94.8	93.6	73.3	0	+1.3	+29.3
Automobile tires and tubes.....	73.0	73.0	73.0	60.5	0	0	+20.7
Cattle feed.....	159.6	159.6	159.6	68.4	0	0	+33.3
Paper and pulp.....	109.0	109.0	107.2	80.0	0	+1.7	+36.2
Rubber, crude.....	46.2	46.2	46.2	34.9	0	0	+32.4
Other miscellaneous.....	98.9	98.9	96.9	81.3	0	+2.1	+21.6
Raw materials.....	117.5	118.2	113.6	66.5	-6	+3.4	+76.7
Semimanufactured articles.....	95.3	95.4	93.9	74.5	-1	+1.5	+27.9
Manufactured products.....	101.8	101.8	100.9	79.1	0	+9	+28.7
All commodities other than farm products.....	100.7	100.7	99.6	77.9	0	+1.1	+29.3
All commodities other than farm products and foods.....	99.7	99.6	98.5	80.1	+1	+1.2	+24.5

Index Numbers by Commodity Groups, 1926 to July 1945

Index numbers of wholesale prices, by commodity groups, for selected years from 1926 to 1944, and by months from July 1944 to July 1945, are shown in table 2.

TABLE 2.—*Index Numbers of Wholesale Prices by Groups of Commodities [1926=100]*

Year and month	Farm products	Foods	Hides and leather products	Textile products	Fuel and light materials	Metals and metal products	Building materials	Chemicals and allied products	Housefurnishing goods	Miscellaneous	All commodities
1926.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1929.....	104.9	99.9	109.1	90.4	83.0	100.5	95.4	94.0	94.3	82.6	95.3
1932.....	48.2	61.0	72.9	54.9	70.3	80.2	71.4	73.9	75.1	64.4	64.8
1933.....	51.4	60.5	80.9	64.8	66.3	79.8	77.0	72.1	75.8	62.5	65.9
1936.....	80.9	82.1	95.4	71.5	76.2	87.0	86.7	78.7	81.7	70.5	80.8
1937.....	86.4	85.5	104.6	76.3	77.6	95.7	95.2	82.6	89.7	77.8	86.3
1938.....	68.5	73.6	92.8	66.7	76.5	95.7	90.3	77.0	86.8	73.3	78.6
1939.....	65.3	70.4	95.6	69.7	73.1	94.4	90.5	76.0	86.3	74.8	77.1
1940.....	67.7	71.3	100.8	73.8	71.7	95.8	94.8	77.0	88.5	77.3	78.6
1941.....	82.4	82.7	108.3	84.8	76.2	99.4	103.2	84.4	94.3	82.0	87.3
1942.....	105.9	99.6	117.7	96.9	78.5	103.8	110.2	95.5	102.4	89.7	98.8
1943.....	122.6	106.6	117.5	97.4	80.8	103.8	111.4	94.9	102.7	92.2	103.1
1944.....	123.3	104.9	116.7	98.4	83.0	103.8	115.5	95.2	104.3	93.6	104.0
1944											
July.....	124.1	105.8	116.2	98.0	83.2	103.7	115.9	95.5	104.3	93.6	104.1
August.....	122.6	104.8	116.0	98.4	83.2	103.8	116.0	95.5	104.4	93.6	103.9
September.....	122.7	104.2	116.0	99.2	83.0	103.8	116.0	94.9	104.4	93.6	104.0
October.....	123.4	104.2	116.2	99.4	82.9	103.7	116.3	95.0	104.4	93.6	104.1
November.....	124.4	105.1	116.2	99.4	83.1	103.7	116.4	94.8	104.4	94.0	104.4
December.....	125.5	105.5	117.4	99.5	83.1	103.8	116.4	94.8	104.4	94.2	104.7
1945											
January.....	126.2	104.7	117.5	99.6	83.3	104.0	116.8	94.9	104.5	94.2	104.9
February.....	127.0	104.7	117.6	99.7	83.3	104.2	117.0	94.9	104.5	94.6	105.2
March.....	127.2	104.6	117.8	99.7	83.4	104.2	117.1	94.9	104.5	94.6	105.3
April.....	129.0	105.8	117.9	99.6	83.5	104.2	117.1	94.9	104.5	94.8	105.7
May.....	129.9	107.0	117.9	99.6	83.7	104.3	117.3	94.9	104.5	94.8	106.0
June.....	130.4	107.5	118.0	99.6	83.9	104.7	117.4	95.0	104.5	94.8	106.1
July.....	129.0	106.9	118.0	99.6	84.3	104.7	117.5	95.3	104.5	94.8	105.9

The price trend for specified years and months since 1926 is shown in table 3 for the following groups of commodities: Raw materials, semimanufactured articles, manufactured products, commodities other than farm products, and commodities other than farm products and foods. The list of commodities included under the classifications "Raw materials," "Semimanufactured articles," and "Manufactured products" was shown on pages 10 and 11 of Wholesale Prices, July-December and Year 1943 (Bulletin No. 785).

TABLE 3.—Index Numbers of Wholesale Prices by Special Groups of Commodities

(1926=100)

Year	Raw materials	Semi-manufactured articles	Manufactured products	All commodities other than farm products	All commodities other than farm products and foods	Year and month	Raw materials	Semi-manufactured articles	Manufactured products	All commodities other than farm products	All commodities other than farm products and foods
1926	100.0	100.0	100.0	100.0	100.0	1944					
1929	97.5	93.9	94.5	93.3	91.6	July	113.6	93.9	100.9	99.6	98.5
1932	55.1	59.3	70.3	68.3	70.2	August	112.7	94.1	100.9	99.7	98.6
1933	56.5	65.4	70.5	69.0	71.2	September	112.8	94.7	100.9	99.7	98.6
1936	79.9	75.9	82.0	80.7	79.6	October	113.2	94.8	101.0	99.8	98.7
1937	84.8	85.3	87.2	86.2	85.3	November	113.8	94.8	101.1	99.9	98.8
						December	114.6	94.8	101.1	100.0	98.9
1938	72.0	75.4	82.2	80.6	81.7	1945					
1939	70.2	77.0	80.4	79.5	81.3	January	115.1	94.9	101.3	100.1	99.1
1940	71.9	79.1	81.6	80.8	83.0	February	115.6	95.0	101.5	100.2	99.2
1941	83.5	86.9	89.1	88.3	89.0	March	115.7	95.0	101.6	100.4	99.2
1942	100.6	92.6	98.6	97.0	95.5	April	115.8	95.0	101.8	100.5	99.3
1943	112.1	92.9	100.1	98.7	96.9	May	117.7	95.0	101.8	100.6	99.4
1944	113.2	94.1	100.8	99.6	98.5	June	118.2	95.4	101.8	100.7	99.6
						July	117.5	95.3	101.8	100.7	99.7

Weekly Fluctuations

Weekly changes in wholesale prices by groups of commodities during June and July 1945 are shown by the index numbers in table 4. These indexes are not averaged to obtain an index for the month but are computed only to indicate the fluctuations from week to week.

TABLE 4.—Weekly Index Numbers of Wholesale Prices by Commodity Groups, June and July 1945

(1926=100)

Commodity group	July 28	July 21	July 14	July 7	June 30	June 23	June 16	June 9	June 2
All commodities	105.8	105.6	105.6	105.8	105.9	105.9	106.0	106.0	106.1
Farm products	129.7	128.5	128.2	129.4	130.1	130.0	131.0	130.7	130.8
Foods	107.4	106.5	106.2	107.2	107.3	107.3	107.7	107.3	107.5
Hides and leather products	118.5	118.5	118.5	118.5	118.5	118.3	118.3	118.3	118.3
Textile products	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
Fuel and lighting materials	84.8	84.8	84.8	84.8	84.8	84.7	84.5	84.5	84.7
Metals and metal products	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8
Building materials	117.3	117.3	117.3	117.3	117.4	117.3	117.3	117.3	117.3
Chemicals and allied products	95.2	95.2	95.2	95.4	95.4	95.3	95.3	95.3	94.9
Housefurnishing goods	106.2	106.2	106.2	106.2	106.2	106.2	106.2	106.2	106.2
Miscellaneous	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6
Raw materials	118.5	117.7	117.6	118.3	118.7	118.6	119.0	118.8	118.9
Semimanufactured articles	95.2	95.2	95.2	95.2	95.3	95.3	95.3	95.3	95.3
Manufactured products	101.9	101.9	101.9	102.0	102.0	102.0	102.0	102.0	102.1
All commodities other than farm products	100.6	100.6	100.6	100.6	100.6	100.6	100.6	100.6	100.6
All commodities other than farm products and foods	99.8	99.8	99.8	99.8	99.8	99.8	99.7	99.7	99.8

Labor Turn-over

Labor Turn-over in Manufacturing, Mining, and Public Utilities, June 1945

FOR every 1,000 workers on factory pay rolls in June 1945, 49 quit, 6 were discharged, 16 were laid off, and 4 left to enter the armed forces. The accession rate of 58 per 1,000, although considerably below that of June for the preceding 3 years, showed about the usual percentage increase over the month of May, reflecting the hiring of students and teachers.

The lay-off rate of 16 per 1,000 was the highest since January 1942, at which time the automobile industry was converting to war production. Curtailed production in the tank, gun, and heavy-ammunition industries raised the rate in the ordnance group from 21 in May to 57 per 1,000 in June, the highest among the major manufacturing groups. Further drastic reductions in the work force were still being made in the transportation-equipment group, which had the second highest rate, 39 per 1,000. The large increase shown for the automobile group, from 15 to 27 per 1,000, was due to cancellation of contracts for bomb fuses, rocket parts, cartridge-case containers, parachutes, tank parts, etc., in automobile plants.

Lay-off rates were doubled in the nonferrous metals and the iron and steel groups as a result of declining needs for combat weapons. In the firearms industry of the iron and steel group, they reached 164 per 1,000, the highest for any single industry. The rate for chemicals, although comparatively low, was more than triple the May rate. This increase reflected cut-backs in the production of small-arms ammunition and explosives.

Lay-offs in the electrical-machinery group increased from 5 to 12 per 1,000. Curtailment in shipbuilding necessitated cut-backs in communication-equipment plants producing telephone systems for battleships and in radio-equipment plants making electronics, radar, and radio condensers.

The discharge rate for all manufacturing, munitions and non-munitions, remained unchanged. The rate in the munitions group was double that in the nonmunitions group. In the ordnance group, the rate was 13 per 1,000—more than double that of 6 per 1,000 for all manufacturing. Reporting firms stated frequently that they were weeding out their less-desirable employees.

Total separation rates for the metal-mining group and for both coal-mining industries were considerably below that for all manufacturing. However, the military and miscellaneous rate of 8 per 1,000 for the metal-mining group was double that in manufacturing as a whole.

Higher rates characterized all industries in this group, notably copper-ore mining, in which the rate rose from 3 to 11 per 1,000. Many soldiers furloughed to work in the mines for 6 months were recalled to military service in June.

The separation rate for women in manufacturing was 97 per 1,000 as against 67 for men. Whereas quits for women have always been higher than for men, involuntary separations have been approximately the same for both. Contrary to the popular opinion, reports from firms did not indicate that women were taking the brunt of the lay-offs which began in December 1943. Only in May and June did separation rates, "other than quits," indicate that plants, faced with the problem of greatly reducing their work forces, were laying off women at a faster rate than men.

TABLE 1.—Monthly Labor Turn-over Rates (per 100 Employees) in Manufacturing Industries ¹

Class of turn-over and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total separation:												
1945.....	6.2	6.0	6.8	6.6	7.0	² 7.5						
1944.....	6.7	6.6	7.4	6.8	7.1	7.1	6.6	7.8	7.6	6.4	6.0	5.7
1943.....	7.1	7.1	7.7	7.5	6.7	7.1	7.6	8.3	8.1	7.0	6.4	6.6
1939.....	3.2	2.6	3.1	3.5	3.5	3.3	3.3	3.0	2.8	2.9	3.0	3.5
Quit:												
1945.....	4.6	4.3	5.0	4.8	4.8	² 4.9						
1944.....	4.6	4.6	5.0	4.9	5.3	5.4	5.0	6.2	6.1	5.0	4.6	4.3
1943.....	4.5	4.7	5.4	5.4	4.8	5.2	5.6	6.3	6.3	5.2	4.5	4.4
1939.....	.9	.6	.8	.8	.7	.7	.7	.8	1.1	.9	.8	.7
Discharge:												
1945.....	.7	.7	.7	.6	.6	² .6						
1944.....	.7	.6	.7	.6	.6	.7	.7	.7	.6	.6	.6	.6
1943.....	.5	.5	.6	.5	.6	.6	.7	.7	.6	.6	.6	.6
1939.....	.1	.1	.1	.1	.1	.1	.1	.1	.1	.2	.2	.1
Lay-off: ³												
1945.....	.6	.7	.7	.8	1.2	² 1.6						
1944.....	.8	.8	.9	.6	.5	.5	.5	.5	.6	.5	.5	.5
1943.....	.7	.5	.5	.6	.5	.5	.5	.5	.5	.5	.7	1.0
1939.....	2.2	1.9	2.2	2.6	2.7	2.5	2.5	2.1	1.6	1.8	2.0	2.7
Military and miscellaneous: ⁴												
1945.....	.3	.3	.4	.4	.4	² .4						
1944.....	.6	.6	.8	.7	.7	.5	.4	.4	.3	.3	.3	.3
1943.....	1.4	1.4	1.2	1.0	.8	.8	.8	.8	.7	.7	.6	.6
Accession:												
1945.....	7.0	5.0	4.9	4.7	5.0	² 5.8						
1944.....	6.5	5.5	5.8	5.5	6.4	7.6	6.3	6.3	6.1	6.0	6.1	5.1
1943.....	8.3	7.9	8.3	7.4	7.2	8.4	7.8	7.6	7.7	7.2	6.6	5.2
1939.....	4.1	3.1	3.3	2.9	3.3	3.9	4.2	5.1	6.2	5.9	4.1	2.8

¹ Month-to-month employment changes as indicated by labor turn-over rates are not precisely comparable to those shown by the Bureau's employment and pay-roll reports, as the former are based on data for the entire month while the latter refer, for the most part, to a 1-week period ending nearest the middle of the month. In addition, labor turn-over data, beginning in January 1943, refer to all employees, whereas the employment and pay-roll reports relate only to wage earners. The labor turn-over sample is not so extensive as that of the employment and pay-roll survey—proportionately fewer small plants are included; printing and publishing and certain seasonal industries, such as canning and preserving, are not covered.

² Preliminary.

³ Including temporary, indeterminate, and permanent lay-offs.

⁴ Miscellaneous separations comprise not more than 0.1 in these figures. In 1939 these data were included with quits.

TABLE 2.—*Monthly Labor Turn-over Rates (per 100 Employees) in Selected Groups and Industries,¹ June 1945²*

Group and Industry	Total separation		Quit		Discharge		Lay-off		Military and miscellaneous		Total accession	
	June	May	June	May	June	May	June	May	June	May	June	May
<i>Manufacturing</i>												
Munitions ¹	8.0	7.2	4.4	4.2	0.8	0.8	2.3	1.7	0.5	0.5	4.7	4.1
Nonmunitions ¹	6.9	6.7	5.7	5.6	.4	.4	.5	.4	.3	.3	7.3	6.2
Ordnance	13.5	9.6	6.1	5.9	1.3	1.2	5.7	2.1	.4	.4	5.3	5.5
Guns, howitzers, mortars, and related equipment	13.4	7.1	4.5	3.8	.8	.8	7.5	2.0	.6	.5	4.0	3.4
Ammunition, except for small arms	14.1	10.2	6.8	6.6	1.4	1.3	5.5	1.9	.4	.4	5.9	6.1
Tanks	17.7	12.0	4.9	5.4	1.5	1.8	10.8	4.3	.5	.5	5.4	6.6
Sighting and fire-control equipment	6.1	4.9	2.9	2.7	.6	.5	2.3	1.3	.3	.4	2.4	2.2
Iron and steel and their products	5.9	5.1	3.4	3.4	.5	.5	1.6	.8	.4	.4	4.1	3.6
Blast furnaces, steel works, and rolling mills	4.0	3.4	2.5	2.4	.2	.2	.9	.4	.4	.4	3.1	2.5
Gray-iron castings	7.4	7.0	5.4	5.3	1.0	1.0	.4	.4	.6	.3	7.5	6.2
Malleable-iron castings	6.4	5.4	4.7	4.3	.7	.6	.5	.1	.5	.4	4.6	4.1
Steel castings	10.8	8.5	5.7	5.6	1.2	1.1	3.5	1.4	.4	.4	3.7	4.2
Cast-iron pipe and fittings	5.8	6.2	3.6	4.3	.6	1.0	1.2	.4	.4	.5	5.0	5.0
Tin cans and other tinware	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Wire products	3.1	3.3	2.0	2.3	.3	.3	.4	.1	.4	.6	3.0	3.1
Cutlery and edge tools	6.3	9.4	4.6	6.1	.5	.5	.9	2.4	.3	.4	4.0	4.7
Tools (except edge tools, machine tools, files, and saws)	5.2	4.9	4.0	4.0	.6	.4	.3	.2	.3	.3	4.2	3.7
Hardware	4.3	4.6	3.4	3.6	.4	.4	.2	.2	.3	.4	6.1	4.3
Stoves, oil burners, and heating equipment	7.0	7.3	4.8	4.8	1.0	1.0	.7	1.0	.5	.5	8.2	7.4
Steam and hot-water heating apparatus and steam fittings	6.8	6.1	5.0	4.2	.8	.5	.5	1.0	.5	.4	4.9	3.9
Stamped and enameled ware and galvanizing	9.0	7.3	6.5	5.7	1.3	.8	.6	.4	.6	.4	10.1	8.0
Fabricated structural-metal products	7.6	9.0	4.8	5.0	.7	1.0	1.6	2.3	.5	.7	5.4	5.2
Bolts, nuts, washers, and rivets	5.5	3.9	3.7	2.6	.8	.6	.6	.2	.4	.5	4.2	3.2
Forgings, iron and steel	6.3	5.6	3.6	3.5	.6	.6	1.7	1.2	.4	.3	3.0	2.9
Firearms (60 caliber and under)	20.5	10.1	3.0	3.3	.7	.6	16.4	5.8	.4	.4	3.1	3.1
Electrical machinery	5.5	4.8	3.4	3.4	.6	.6	1.2	.5	.3	.3	4.1	3.6
Electrical equipment for industrial use	4.6	3.9	3.1	2.7	.4	.4	.7	.4	.4	.4	3.4	2.9
Radios, radio equipment, and phonographs	5.9	5.1	3.5	3.7	.6	.6	1.5	.5	.3	.3	4.5	4.0
Communication equipment, except radios	6.7	5.6	3.3	3.9	1.1	1.0	1.9	.4	.4	.3	4.0	4.1
Machinery, except electrical	5.1	4.5	3.3	3.0	.6	.6	.7	.4	.5	.5	4.4	3.4
Engines and turbines	5.8	4.8	3.5	3.2	.8	.6	1.0	.5	.5	.5	5.1	3.8
Agricultural machinery and tractors	4.5	4.2	3.4	3.1	.4	.4	.1	.1	.6	.6	4.1	3.7
Machine tools	4.7	3.6	2.4	2.1	.6	.6	1.4	.5	.3	.4	2.6	2.2
Machine-tool accessories	5.4	4.5	2.9	2.6	.9	.9	1.2	.6	.4	.4	4.0	3.4
Metalworking machinery and equipment, not elsewhere classified	4.2	4.0	2.9	2.6	.6	.8	.3	.2	.4	.4	4.4	3.4
General industrial machinery, except pumps	5.2	5.1	3.5	3.3	.6	.7	.7	.6	.4	.5	4.4	3.5
Pumps and pumping equipment	4.7	4.3	3.4	3.4	.7	.5	(8)	(8)	.6	.4	4.7	4.2
Transportation equipment, except automobiles	10.9	10.5	5.3	5.0	1.1	1.1	3.9	3.8	.6	.6	4.8	4.0
Aircraft	12.1	12.1	6.0	5.3	.7	.8	4.7	5.2	.7	.8	3.3	3.1
Aircraft parts, including engines	8.1	7.4	3.4	3.1	.6	.6	3.7	3.3	.4	.4	3.5	3.3
Shipbuilding and repairs	12.1	11.5	6.2	6.1	1.7	1.6	3.6	3.1	.6	.7	6.8	5.2
Automobiles	7.9	6.9	4.0	4.1	.8	.9	2.7	1.5	.4	.4	5.7	4.9
Motor vehicles, bodies, and trailers	7.1	7.3	3.4	3.8	.8	1.0	2.5	2.1	.4	.4	5.4	4.2
Motor-vehicle parts and accessories	8.5	6.8	4.4	4.3	.9	.9	2.8	1.2	.4	.4	5.9	5.4

See footnotes at end of table.

TABLE 2.—Monthly Labor Turn-over Rates (per 100 Employees) in Selected Groups and Industries,¹ June 1945²—Continued

Group and Industry	Total separation		Quit		Discharge		Lay-off		Military and miscellaneous		Total accession	
	June	May	June	May	June	May	June	May	June	May	June	May
Manufacturing—Continued												
Nonferrous metals and their products.....	8.6	7.2	5.3	5.0	0.7	0.7	2.1	1.1	0.5	0.4	5.6	5.6
Primary smelting and refining, except aluminum and magnesium.....	4.4	3.8	3.3	3.0	.4	.3	.2	.1	.5	.4	4.3	3.5
Aluminum and magnesium smelting and refining.....	10.7	8.2	9.0	7.1	.4	.4	.9	.2	.4	.5	10.2	8.3
Rolling and drawing of copper and copper alloys.....	6.2	6.0	3.9	4.0	.5	.7	1.4	.9	.4	.4	2.5	2.9
Aluminum and magnesium products.....	11.2	8.9	6.0	5.7	.7	.9	3.9	1.9	.6	.5	5.7	6.4
Lighting equipment.....	6.5	5.9	5.4	4.7	.5	.5	.3	.4	.3	.3	7.7	5.5
Nonferrous-metal foundries, except aluminum and magnesium.....	6.6	6.5	4.7	4.6	.8	.7	.7	.9	.4	.3	5.9	5.6
Lumber and timber basic products.....	9.7	9.4	8.4	8.2	.5	.4	.5	.4	.3	.4	9.9	9.3
Sawmills.....	9.9	9.6	8.7	8.4	.4	.4	.5	.4	.3	.4	9.6	9.1
Planing and plywood mills.....	7.1	6.9	5.6	5.6	.8	.7	.4	.2	.3	.4	8.4	7.0
Furniture and finished lumber products.....	8.8	9.4	7.4	8.3	.5	.5	.6	.3	.3	.3	9.5	8.5
Furniture, including mattresses and bedsprings.....	8.5	8.9	7.3	8.1	.6	.5	.3	.1	.3	.2	9.4	8.6
Stone, clay, and glass products.....	4.9	4.9	3.9	3.9	.4	.4	.2	.2	.4	.4	5.7	5.1
Glass and glass products.....	4.7	5.1	3.7	4.0	.4	.5	.2	.2	.4	.4	5.6	5.4
Cement.....	3.8	3.8	3.1	3.0	.3	.3	.1	.2	.3	.3	6.1	6.2
Brick, tile, and terra cotta.....	5.6	5.9	4.7	5.0	.4	.5	.1	.1	.4	.3	7.2	6.2
Pottery and related products.....	6.2	4.8	5.1	4.0	.3	.3	.5	.1	.3	.4	6.0	5.2
Textile-mill products.....	5.8	5.8	4.9	4.9	.4	.4	.2	.2	.3	.3	6.1	5.5
Cotton.....	6.7	6.7	5.8	5.9	.5	.4	.1	.1	.3	.3	7.0	6.5
Silk and rayon goods.....	6.0	6.2	5.0	5.3	.5	.5	.2	.1	.3	.3	7.0	6.2
Woolen and worsted, except dyeing and finishing.....	4.0	3.9	3.0	2.8	.4	.3	.4	.6	.2	.2	4.1	3.6
Hosiery, full-fashionned.....	3.4	4.7	2.9	3.5	.2	.2	.2	.8	.1	.2	3.8	3.2
Hosiery, seamless.....	5.7	5.3	5.3	4.8	.2	.3	.1	.1	.1	.1	6.2	5.1
Knitted underwear.....	5.0	4.8	4.4	4.2	.3	.2	.2	.3	.1	.1	6.3	5.0
Dyeing and finishing textiles, including woolen and worsted.....	3.9	4.4	2.3	3.1	.5	.5	.4	.3	.7	.5	4.0	3.4
Apparel and other finished textile products.....	5.3	4.8	4.5	4.3	.2	.2	.5	.2	.1	.1	5.6	4.6
Men's and boys' suits, coats, and overcoats.....	3.8	3.3	3.4	3.0	.1	.1	.2	.1	.1	.1	4.3	3.2
Men's and boys' furnishings, work clothing, and allied garments.....	4.9	5.0	4.5	4.6	.2	.2	.1	.1	.1	.1	5.5	4.5
Leather and leather products.....	5.9	5.2	5.0	4.5	.4	.4	.3	.1	.2	.2	6.4	5.2
Leather.....	4.3	3.8	3.6	2.9	.3	.5	.1	.1	.3	.3	5.7	3.9
Boots and shoes.....	6.2	5.4	5.3	4.8	.4	.3	.3	.1	.2	.2	6.5	5.4
Food and kindred products.....	8.7	8.7	7.4	7.3	.6	.5	.4	.5	.3	.4	9.7	7.8
Meat products.....	7.4	8.4	6.3	6.8	.5	.5	.2	.5	.4	.6	9.0	6.8
Grain-mill products.....	10.9	9.4	9.5	8.2	.8	.5	.2	.2	.4	.5	13.1	9.3
Tobacco manufactures.....	6.3	7.8	5.5	6.9	.5	.5	.2	.3	.1	.1	7.1	6.5
Paper and allied products.....	6.5	6.7	5.2	5.5	.5	.5	.3	.2	.5	.5	7.7	6.6
Paper and pulp.....	6.0	6.2	4.6	5.1	.5	.4	.4	.2	.5	.5	6.7	6.3
Paper boxes.....	8.3	8.0	7.0	6.7	.7	.7	.2	.2	.4	.4	10.4	7.6
Chemicals and allied products.....	7.1	5.9	4.7	4.4	.7	.7	1.3	.4	.4	.4	5.1	4.9
Paints, varnishes, and colors.....	3.2	2.9	2.4	2.2	.4	.4	.1	(⁵)	.3	.3	4.6	3.1
Rayon and allied products.....	4.7	4.1	3.8	3.3	.3	.3	.1	.1	.5	.4	6.2	4.2
Industrial chemicals, except explosives.....	4.4	4.5	3.3	3.1	.5	.5	.2	.5	.4	.4	5.5	4.1
Explosives.....	8.9	8.4	5.7	6.2	1.1	1.3	1.7	.6	.4	.3	3.8	6.5
Small-arms ammunition.....	12.1	7.7	7.1	6.0	.9	1.0	3.8	.3	.3	.4	5.0	5.6

See footnotes at end of table.

TABLE 2.—Monthly Labor Turn-over Rates (per 100 Employees) in Selected Groups and Industries,¹ June 1945²—Continued

Group and industry	Total separation		Quit		Discharge		Lay-off		Military and miscellaneous		Total accession	
	June	May	June	May	June	May	June	May	June	May	June	May
Manufacturing—Continued												
Products of petroleum and coal.....	3.3	3.2	2.4	2.2	0.3	0.4	0.2	0.2	0.4	0.4	3.9	3.4
Petroleum refining.....	3.1	3.0	2.3	2.1	.2	.3	.2	.2	.4	.4	3.8	3.4
Rubber products.....	6.1	6.0	4.7	4.5	.5	.5	.5	.6	.4	.4	5.5	5.0
Rubber tires and inner tubes.....	5.8	5.9	4.5	4.5	.5	.5	.4	.5	.4	.4	4.9	4.9
Rubber footwear and related products.....	7.4	6.5	6.4	5.9	.5	.4	.1	(³)	.4	.2	8.0	5.3
Miscellaneous rubber industries.....	6.0	6.1	4.5	4.3	.6	.6	.6	.8	.3	.4	5.9	5.0
Miscellaneous industries.....	5.7	4.8	3.1	2.8	.5	.5	1.7	1.1	.4	.4	3.6	2.9
Nonmanufacturing												
Metal mining.....	5.8	5.2	4.5	4.2	.4	.4	.1	.2	.8	.4	4.4	4.0
Iron ore.....	2.7	2.7	2.0	1.9	.2	.2	.1	.3	.4	.3	2.7	2.7
Copper ore.....	7.5	6.1	5.9	5.4	.4	.3	.1	.1	1.1	.3	4.3	3.7
Lead and zinc ore.....	6.8	7.0	5.5	5.9	.3	.5	.1	.1	.9	.5	5.2	5.6
Metal mining, not elsewhere classified, including aluminum ore.....	7.2	6.0	5.3	4.4	.9	.9	(⁴)	.2	1.0	.5	7.4	5.4
Coal mining:												
Anthracite.....	1.5	1.1	1.1	.8	(⁵)	(⁵)	.3	.2	.1	.1	1.5	.8
Bituminous coal.....	3.6	3.0	3.1	2.4	.2	.2	.1	.2	.2	.2	3.3	3.0
Public utilities:												
Telephone.....	3.2	2.9	2.9	2.5	.1	.1	.1	.1	.1	.2	5.5	3.4
Telegraph.....	3.7	3.3	3.4	3.0	.1	.1	.1	.1	.1	.1	4.0	2.9

¹ Since January 1943 manufacturing firms reporting labor turn-over have been assigned industry codes on the basis of current products. Most plants in the employment and pay-roll sample, comprising those which were in operation in 1939, are classified according to their major activity at that time, regardless of any subsequent change in major products.

² Preliminary figures.

³ The munitions division, which replaces the selected war industries group, includes the following major industry groups: Ordnance; iron and steel; electrical machinery; machinery except electrical; automobiles; transportation equipment, except automobiles; nonferrous metals; chemicals; products of petroleum and coal; rubber. The nonmunitions division includes lumber; furniture and finished lumber products; stone, clay, and glass; textile-mill products; apparel and finished textile products; leather; food and kindred products; tobacco; paper and pulp; miscellaneous industries. Comparable data for 1943 and 1944 appeared in the July 1945 issue of the Monthly Labor Review.

⁴ Not available.

⁵ Less than 0.05.

TABLE 3.—Monthly Labor Turn-over Rates (per 100 Employees)¹ for Men and Women in Selected Industries Engaged in War Production, June 1945²

Group and industry		Total separation		Quit		Total accession	
		Men	Women	Men	Women	Men	Women
All manufacturing.....		6.7	9.7	4.3	6.3	5.3	6.6
Ordnance.....		10.8	17.9	5.0	7.9	4.8	6.2
Guns, howitzers, mortars, and related equipment.....		11.5	19.7	3.7	7.3	3.5	5.5
Ammunition, except for small arms.....		11.2	18.2	5.8	8.2	5.4	6.4
Tanks.....		13.6	31.7	3.6	9.4	5.3	10.1
Sighting and fire-control equipment.....		4.7	8.8	2.2	4.4	1.9	3.3
Iron and steel and their products.....		5.5	10.0	3.1	5.6	4.0	6.2
Blast furnaces, steel works, and rolling mills.....		3.5	9.1	2.3	4.5	3.2	3.8
Gray-iron castings.....		7.2	9.7	5.2	7.6	7.4	9.3
Malleable-iron castings.....		6.4	5.8	4.8	3.4	4.6	4.7
Steel castings.....		10.4	16.7	5.7	4.9	3.8	2.9
Cast-iron pipe and fittings.....		5.3	10.9	3.2	8.2	4.9	6.1
Firearms (60 caliber and under).....		25.4	23.3	2.5	5.2	2.1	3.4
Electrical machinery.....		3.8	7.4	2.1	4.9	2.8	5.5
Electrical equipment for industrial use.....		3.2	6.9	1.8	5.1	2.3	5.2
Radios, radio equipment, and phonographs.....		4.1	7.5	2.0	4.7	3.0	5.6
Communication equipment, except radios.....		4.6	8.8	2.0	4.6	3.5	4.5
Machinery, except electrical.....		4.5	7.4	2.8	5.1	4.0	5.9
Engines and turbines.....		5.2	7.8	2.9	5.5	4.4	7.3
Machine tools.....		4.2	8.5	2.1	4.3	2.1	5.5
Machine-tool accessories.....		4.8	7.7	2.4	4.4	3.9	4.3
Metalworking machinery and equipment, not elsewhere classified.....		3.7	7.7	2.5	5.1	3.8	7.4
General industrial machinery, except pumps.....		4.5	7.5	2.9	5.3	3.8	6.0
Pumps and pumping equipment.....		4.2	6.9	2.7	5.8	3.7	8.0
Transportation equipment, except automobiles.....		10.1	14.0	4.9	6.9	4.9	5.0
Aircraft.....		10.6	14.7	5.0	7.8	3.1	3.8
Aircraft parts, including engines.....		6.7	12.1	2.9	4.7	3.0	4.8
Shipbuilding and repairs.....		12.1	16.1	6.1	8.6	7.1	8.5
Nonferrous metals and their products.....		8.1	10.1	5.2	5.9	5.4	6.6
Primary smelting and refining, except aluminum and magnesium.....		4.3	4.8	3.2	3.9	4.3	4.7
Aluminum and magnesium smelting and refining.....		11.0	7.3	9.2	6.1	10.2	10.2
Rolling and drawing of copper and copper alloys.....		5.2	12.7	3.6	6.0	2.1	5.1
Aluminum and magnesium products.....		10.5	13.4	5.9	6.5	5.5	6.3
Nonferrous-metal foundries, except aluminum and magnesium.....		6.0	8.0	4.3	5.7	5.5	6.8
Chemicals and allied products.....		6.0	9.5	3.8	6.7	4.3	6.9
Industrial chemicals, except explosives.....		4.2	5.4	3.0	4.4	5.1	6.9
Explosives.....		7.6	12.2	4.8	8.0	2.7	6.2
Small-arms ammunition.....		11.2	13.1	6.0	8.4	3.9	6.2

¹ These figures are presented to show comparative turn-over rates and should not be used to estimate employment.

² These figures are based on a slightly smaller sample than that for all employees, inasmuch as some firms do not report separate data for women.

Building Operations

Urban Building Construction in July 1945

THE 16-percent increase in the value of building construction started in urban areas of the United States brought the July 1945 total to 169 million dollars, an amount greater than in any other month since September 1942. While both Federally and non-Federally financed work increased during the month, the continuous upward trend in building construction as a whole, which started last February, is attributable entirely to a constant rise in non-Federal activity.

Both new residential construction and new nonresidential building showed a substantial gain over June—14 and 44 percent, respectively. On the other hand, additions, alterations, and repairs fell off 8 percent owing to a drop of approximately 2.1 million dollars in Federal work and of 1.7 million dollars in non-Federal work.

TABLE 1.—Summary of Building Construction Started in All Urban Areas, July 1945

Class of construction	Number of buildings			Value		
	July 1945	Percent of change from—		July 1945 (in thousands of dollars)	Percent of change from—	
		June 1945	July 1944		June 1945	July 1944
All building construction.....	74,976	+1.5	+16.7	168,854	+15.9	+72.6
New residential.....	14,106	+12.6	+59.8	60,345	+13.6	+98.0
New nonresidential.....	12,205	+3.2	+39.5	64,384	+44.0	+71.0
Additions, alterations, and repairs.....	48,665	-1.8	+4.3	44,125	-7.9	+48.6

There were 15,913 new dwelling units put under construction in July, a gain of 17 percent over the 13,586 started in June. Privately financed units increased from 11,988 to 12,956 and Federally financed from 1,598 to 2,957.

TABLE 2.—*Number and Value of New Dwelling Units Started in All Urban Areas, by Source of Funds and Type of Dwelling, July 1945*

Source of funds and type of dwelling	Number of dwelling units			Value		
	July 1945	Percent of change from—		July 1945 (in thousands of dollars)	Percent of change from—	
		June 1945	July 1944		June 1945	July 1944
All dwellings.....	15,913	+17.1	+61.9	59,830	+13.7	+99.3
Privately financed.....	12,956	+8.1	+59.7	51,682	+7.3	+108.1
1-family.....	10,464	+3	+60.1	43,520	—1	+115.7
2-family ¹	782	+42.2	—9.1	2,707	+39.5	+7.8
Multifamily ²	1,710	+70.8	+138.5	5,455	+102.4	+154.0
Federally financed.....	2,957	+85.0	+72.3	8,148	+84.2	+57.2

¹ Includes 1- and 2-family dwellings with stores.² Includes multifamily dwellings with stores.*Comparison of July 1945 and July 1944*

Over the year, the volume of urban building construction started increased 73 percent; Federal contract awards rose 6 percent and the value of non-Federal building was doubled. All types of construction financed with other-than-Federal funds reached higher levels in July 1945 than in July 1944, with the greatest increase in dollar volume occurring in new nonresidential building, which rose from 15 million to 44 million dollars. Federal nonresidential building, however, experienced a slight drop, from 22 million to 20 million dollars. Although there were gains in Federally financed residential construction and additions, alterations, and repair work, the increases were not nearly so great as they were for non-Federal activity.

Comparison of First 7 Months of 1944 and 1945

The cumulative value of urban building construction begun during the first 7 months of 1945 was 829 million dollars, approximately one-fourth more than the aggregate of 661 million dollars for the same period in 1944. There were increases in both Federal and non-Federal work; however, the former rose only 3 percent while the latter rose 36 percent. The entire increase in both new residential and new nonresidential building occurred in non-Federally financed work. The former rose from 228 million to 263 million dollars and the latter from 259 million to 326 million dollars. Federal contract awards for new residential construction dropped 5 million dollars and new non-residential awards remained practically unchanged. Both Federal and non-Federal additions, alterations, and repairs were higher in value at the end of July 1945 than in July 1944.

TABLE 3.—*Value of Building Construction Started in All Urban Areas, by Class of Construction, First 7 Months of 1944 and 1945*

Class of construction	Value (in millions of dollars)								
	Total production			Federal			Other than Federal		
	First 7 months of—		Percent of change	First 7 months of—		Percent of change	First 7 months of—		Percent of change
	1945	1944		1945	1944		1945	1944	
All construction.....	829	661	+25.4	215	208	+3.4	614	453	+35.5
New residential.....	263	228	+15.4	28	33	-15.2	235	195	+20.5
New nonresidential.....	326	259	+25.9	166	167	-.6	160	92	+73.9
Additions, alterations, and repairs.....	240	174	+37.9	21	8	+162.5	219	166	+31.9

TABLE 4.—*Number and Value of New Dwelling Units Started in All Urban Areas, by Source of Funds and Type of Dwelling, First 7 Months of 1944 and 1945*

Source of funds and type of dwelling	Number of dwelling units			Value (in thousands of dollars)		
	First 7 months of—		Percent of change	First 7 months of—		Percent of change
	1945	1944		1945	1944	
All dwellings.....	73,859	74,372	-0.7	259,347	225,437	+15.0
Privately financed.....	64,009	61,460	+4.1	232,728	193,433	+20.3
1-family.....	52,225	46,769	+11.7	197,103	147,529	+33.6
2-family ¹	4,610	6,763	-31.8	14,434	22,691	-36.4
Multifamily ²	7,174	7,928	-9.5	21,191	23,213	-8.7
Federal.....	9,850	12,912	-23.7	26,619	32,004	-16.8

¹ Includes 1- and 2-family dwellings and stores.² Includes multifamily dwellings with stores.*Construction from Public Funds, July 1945*

The value of contracts awarded and force-account work started during July and June 1945 and July 1944 on all construction projects, excluding shipbuilding, financed wholly or partially from Federal funds and reported to the Bureau of Labor Statistics, is shown in table 5. This table includes construction both inside and outside the corporate limits of cities in urban areas of the United States.

TABLE 5.—*Value of Contracts Awarded and Force-Account Work Started on Construction Projects Financed From Federal Funds, July 1945*

Source of funds	Value (in thousands of dollars) of contracts awarded and force-account work started		
	July 1945 ¹	June 1945 ²	July 1944 ²
All Federal sources.....	73,851	86,490	90,858
War public works.....	2,665	2,714	7,563
Regular Federal appropriations ³	62,384	78,994	78,611
Federal Public Housing Authority.....	8,802	4,782	4,684

¹ Preliminary; subject to revision.² Revised.³ Excludes the following amounts (in thousands of dollars) for ship construction: July 1945, none; June 1945, 16,818; July 1944, 91,369.

Coverage and Method

Figures on building construction in this report cover the entire urban area of the United States which by Census definition includes all incorporated places with a 1940 population of 2,500 or more and, by special rule, a small number of unincorporated civil divisions. Valuation figures, the basis for statements concerning value, are derived from estimates of construction cost made by prospective private builders when applying for permits to build, and the value of contracts awarded by Federal and State governments. No land costs are included. Unless otherwise indicated, only building construction within the corporate limits of cities in urban areas is included in the tabulations.

Reports of building permits which were received in July 1945 for cities containing between 80 and 85 percent of the urban population of the country provide the basis for estimating the total number of buildings and dwelling units and the valuation of private urban building construction. Similar data for Federally financed urban building construction are compiled directly from notifications of construction contracts awarded, as furnished by Federal agencies.

The contracts awarded and force-account work started on Federally financed building construction inside the corporate limits of cities in urban areas were valued at \$30,474,000 in July 1945, \$23,393,000 in June 1945, and \$28,879,000 in July 1944.

Trend of Employment, Earnings, and Hours

Summary of Employment Reports for July 1945

THE total number of employees in nonagricultural establishments was 37,177,000 in July 1945—a decrease of 379,000 from June 1945 and of 1½ million from July 1944. While increases of about 50,000 employees were reported in both the construction and finance, service, and miscellaneous divisions, the decline in manufacturing offset these increases.

Industrial and Business Employment

Manufacturing production-worker employment declined by a little more than 400,000 between June and July. Cut-backs and cancellations of war contracts accounted for almost 90 percent of the employment cuts. The munitions group of manufacturing industries employed 6,473,000 workers in July, as compared with 6,832,000 in June 1945 and 7,891,000 in July of last year. All the major munitions groups reduced employment over the month.

The transportation-equipment group, which is largely comprised of the shipbuilding and aircraft industries, reduced employment by 120,000 production workers. The employment cut in this group was shared equally by the airplane and shipbuilding industries. Further effects of the cut-backs in aircraft production are indicated by the decline of 48,000 in the automobile industry. Many automobile plants were engaged in the manufacture of aircraft and tanks throughout the war. Comments from firms in this group indicate that these declines, like those in the transportation-equipment group, are the result of decreased needs for war goods.

Second in importance to the drop in the transportation-equipment group was that in iron and steel. The number of production workers in the iron and steel group declined by 80,000 between June and July, reflecting declines in almost all the industries comprising this group. In addition to cancellations of direct war orders for firearms, bag and shell loading, heavy ammunition, and guns, the drop in employment in this group reflects the reduced need for parts by the aircraft and shipbuilding industries.

While the transportation-equipment, automobile, and iron and steel groups accounted for almost 70 percent of the munitions cut-backs, declines of more than 15,000 production workers were reported by the machinery group (37,000), electrical machinery (29,000), chemicals (24,000), and nonferrous metals (17,000) groups.

Employment in the nonmunitions group declined by slightly less than 50,000 workers between June and July. The only sizable declines

were reported by the textile and apparel groups. The decline in apparel of 31,000 workers, while seasonal, was of much greater magnitude than usual. The less-than-seasonal increases in the food group partially offset these declines.

The number of production workers in the canning industry of the food group increased seasonally by about 50,000. Most of these workers were added to process the cherry and apricot crops.

The number of bituminous-coal miners declined over the month by 7,000 to a level of 324,000 in July, as compared with 351,000 a year ago. The difficulty in recruiting labor for this industry has impelled spokesmen from the industry to ask for the release of miners from the armed forces.

The decline in employment of almost 1,500 metal miners over the month was due in part to a shortage of labor but was intensified by the recall of furloughed metal miners by the Army.

TABLE 1.—*Estimated Number of Production Workers and Indexes of Production-Worker Employment in Manufacturing Industries, by Major Industry Group*¹

Industry group	Estimated number of production workers (in thousands)				Production worker indexes (1939=100)	
	July 1945 ²	June 1945	May 1945	July 1944	July 1945 ²	June 1945
All manufacturing.....	11,752	12,157	12,406	13,544	143.5	148.4
Durable goods.....	6,658	6,968	7,256	8,144	184.4	193.8
Nondurable goods.....	5,094	5,159	5,150	5,400	111.2	112.6
Iron and steel and their products.....	1,473	1,553	1,606	1,669	148.6	156.7
Electrical machinery.....	628	657	670	736	242.5	253.6
Machinery, except electrical.....	1,051	1,088	1,108	1,194	198.9	205.9
Transportation equipment, except automobiles.....	1,481	1,601	1,745	2,275	933.2	1008.6
Automobiles.....	563	611	634	691	140.0	151.8
Nonferrous metals and their products.....	373	390	401	416	162.5	170.0
Lumber and timber basic products.....	443	443	443	480	105.4	105.4
Furniture and finished lumber products.....	325	329	329	346	99.1	100.2
Stone, clay, and glass products.....	321	326	320	337	109.5	111.0
Textile-mill products and other fiber manufactures.....	1,017	1,040	1,035	1,088	88.9	90.9
Apparel and other finished textile products.....	764	795	801	838	96.8	100.7
Leather and leather products.....	305	307	303	312	88.0	88.6
Food.....	1,026	986	967	1,120	120.0	115.4
Tobacco manufactures.....	78	80	80	83	84.1	85.9
Paper and allied products.....	299	303	299	311	112.6	114.0
Printing, publishing, and allied industries.....	325	327	326	333	99.1	99.6
Chemicals and allied products.....	588	612	623	584	204.0	212.5
Products of petroleum and coal.....	134	134	134	134	127.0	126.8
Rubber products.....	182	186	189	192	150.5	153.6
Miscellaneous industries.....	376	389	393	405	153.5	159.1

¹ The estimates and indexes presented in this table have been adjusted to levels indicated by final 1942 and preliminary 1943 data made available by the Bureau of Employment Security of the Federal Security Agency. The term "production worker" has been substituted for the term "wage earner" which has been used in our previous reports. This conforms with the terminology and standard definitions of classes of workers in manufacturing industries formulated by the Division of Statistical Standards of the U. S. Bureau of the Budget. The use of "production worker" in place of "wage earner" has no appreciable effect on the employment estimates and indexes since there is very little difference in the definitions.

² Preliminary.

Public Employment

Reductions in Federal personnel as a result of the end of the war in Europe were not yet evident by July 1945. On the contrary, Federal employment rose 57,000 over June. The need of the War Department for services in connection with the occupation operations

and of the Navy Department for personnel at air stations and for procurement activities was responsible for the war-agency rise of 38,000. The usual seasonal rise in the employment of the Agriculture and Interior Departments continued in July, and the Veterans' Administration added 3,000 persons to its hospital and other activities in its veterans-assistance program. With total employment of 65,000, the Veterans' Administration became the seventh largest agency in the Government. It is exceeded only by War, Navy, Post Office, Treasury, Agriculture, and Commerce. At the conclusion of Commerce's agricultural census, when its large field staff will be dismissed, the Veterans' Administration will move up to sixth place.

With the enactment of the Federal Employees Pay Act of 1945, Federal pay rolls reached a volume of 710 million dollars in July 1945. The increase of 26 million dollars over June includes increases in the basic salaries of a million and a quarter workers. Although the Pay Act also provided for a higher rate of overtime pay, hours were cut from 48 to 44 a week for approximately one-fourth of the employees with the result that the decrease in overtime pay to these employees effected a saving to the Government of 8 million dollars for the July period. Although only six agencies remained on a scheduled 48-hour week (War, Navy, The Panama Canal, Veterans' Administration, TVA, and Treasury), they had three-fourths of the employees who were given basic pay increases.

Since 1934, Federal pay rolls have been reported for all periods ending within the calendar month. Pay rolls which covered weekly or biweekly periods, such as those for the mechanical and laboring personnel at the navy yards and at the Government Printing Office, showed peaks in 1 or 2 months of the year because of the inclusion of the pay for an extra period, and were somewhat understated in the other months. Personnel under the Classification Act of 1923, as amended, and some of the other groups of Federal employees, on the other hand, were paid semimonthly, and, because these groups were sizable, their pay rolls tended to give the total the appearance of regularity. The Federal Pay Act of 1945, however, requires that the classified employees be paid biweekly. Therefore, the pay roll included in the figure for July 1945 for this group covers only 4 weeks and is understated, on a monthly basis, by approximately 23 million dollars. That is, if the pay-roll periods for June and July had been comparable, the rise in the total resulting from the passage of the Pay Act would have been approximately 46 million dollars.

Source of data.—Data for the Federal executive service are reported through the Civil Service Commission, whereas data for the legislative and judicial services and Government corporations are reported to the Bureau of Labor Statistics. Force-account employment is also included in construction employment (table 5), and navy-yard employment is also included in employment on shipbuilding and repair projects (table 4). The revised pay-roll series showing monthly figures from 1943 to date is available upon request.

TABLE 2.—*Employment and Pay Rolls for Regular Federal Services and for Government Corporations, in Selected Months*

Year and month	Total	Execu- tive ¹	Legis- lative	Judicial	Govern- ment cor- porations ²
Employment					
July 1939.....	978,683	945,467	5,353	2,292	25,571
July 1940.....	1,079,976	1,045,235	5,886	2,468	26,387
July 1941.....	1,473,284	1,433,783	6,132	2,526	30,843
July 1942.....	2,350,646	2,308,761	6,539	2,645	32,701
July 1943.....	3,334,770	3,290,622	6,163	2,624	35,361
July 1944.....	3,352,013	3,306,336	6,258	2,663	36,726
April 1945.....	3,613,169	3,570,080	6,346	2,626	34,117
May 1945 ³	3,638,147	3,595,249	6,361	2,617	33,920
June 1945 ³	3,653,765	3,611,087	6,349	2,613	33,716
July 1945 ³	3,711,683	3,667,861	6,368	2,706	34,748
Pay rolls (in thousands) ⁴					
July 1943.....	\$664,483	\$656,796	\$1,511	\$768	\$5,408
July 1944.....	699,890	692,130	1,528	775	5,457
April 1945.....	680,255	672,487	1,627	782	5,359
May 1945 ³	681,803	674,000	1,635	777	5,391
June 1945 ³	683,966	676,012	1,657	816	5,481
July 1945 ³	709,701	701,432	1,784	819	5,606

¹ Includes employees in United States navy yards who are also included under shipbuilding (table 4) and employees on force-account construction who are also included under construction projects (table 5). Includes employees stationed outside continental United States.

² Data are for employees of the Panama Railroad Company, the Federal Reserve banks, and banks of the Farm Credit Administration, who are paid out of operating revenues and not out of Federal appropriations. Data for other Government corporations are included under the executive service.

³ Preliminary.

⁴ Pay rolls are from the revised series. Monthly figures are available upon request for the period from January 1943 to date. Revised data for 1939-42 will be available shortly. Data are for all pay periods ending within the calendar month.

TABLE 3.—*Employment and Pay Rolls for the Executive Branch of the Federal Government, by War and Other Agencies, in Selected Months* ¹

Year and month	Total	War agencies ¹			Other agencies		
		All areas	Continen- tal United States	Outside continen- tal United States ²	All areas	Conti- nental United States	Outside continen- tal United States
Employment							
July 1939.....	945,467	209,223	179,370	29,853	736,244	726,829	9,415
July 1940.....	1,045,235	280,102	232,061	48,041	765,133	753,430	11,703
July 1941.....	1,433,783	617,601	541,618	75,983	816,182	802,868	13,314
July 1942.....	2,308,761	1,430,828	1,240,077	181,751	877,933	863,671	14,262
July 1943.....	3,290,622	2,468,875	2,181,359	287,516	821,747	806,531	15,216
July 1944.....	3,306,366	2,476,218	2,103,800	372,418	830,148	814,428	15,720
April 1945.....	3,570,080	2,689,936	2,056,697	633,239	880,144	863,656	16,488
May 1945 ⁴	3,595,249	2,702,723	2,038,624	664,099	892,526	876,011	16,515
June 1945 ⁴	3,611,087	2,716,323	2,018,847	697,476	894,764	878,174	16,590
July 1945 ⁴	3,667,861	2,754,156	2,020,233	733,923	913,705	895,183	18,522
Pay rolls (in thousands) ³							
July 1943.....	\$656,796	\$494,176	\$449,262	\$44,914	\$162,620	\$150,345	\$3,275
July 1944.....	692,130	522,075	470,292	51,783	170,055	166,668	3,387
April 1945.....	672,487	504,613	455,785	48,828	167,874	164,224	3,650
May 1945 ⁴	674,000	504,118	448,465	55,653	169,882	166,104	3,778
June 1945 ⁴	676,012	504,096	451,879	52,217	171,916	167,820	4,096
July 1945 ⁴	701,432	525,192	471,207	53,985	176,240	171,701	4,539

¹ Includes employees in United States navy yards who are also included under shipbuilding (table 4) and employees on force-account construction who are also included under construction projects (table 5).

² Covers War and Navy Departments, Maritime Commission, National Advisory Committee for Aeronautics, The Panama Canal, and the emergency war agencies.

³ Includes Alaska and the Panama Canal Zone.

⁴ Preliminary.

⁵ Pay rolls are from the revised series. Monthly figures are available upon request for the period from January 1943 to date. Revised data for 1939-42 will be available shortly. Data are for all pay periods ending within the calendar month.

Employment in Shipyards

Continuing the trend which started in January 1944, employment in shipyards declined 48,500 during July 1945, which was only slightly less than the average monthly loss of 52,400 workers during the first 6 months of 1945. The total of 1,091,800 workers included 316,900 workers in United States navy yards and 774,900 workers in private shipyards.

During July, employment in private shipyards declined 49,600, while employment in United States navy yards increased by 1,100 workers. This increase was due entirely to the increased repair load in the Pacific Coast navy yards and naval dry docks.

Contrasting with the decline of 48,500 workers in the total industry, employment on service and repair work increased by 23,500 during July. Increased employment on this type of work was general throughout the country, although more than half of the increase (14,600 workers) was in Pacific Coast yards. During the month, employment on the construction of new ships declined by 72,000.

Shipyards in the Great Lakes region had the greatest percentage decrease in employment, 17.9 percent, and Inland shipyards were second with a decrease of 16.3 percent. North Atlantic shipyards had the greatest numerical loss, 19,100 workers, and Pacific Coast shipyards the next greatest loss, 11,500 workers.

Pay rolls of shipyard workers amounted to \$317,117,000 for July, which was \$10,441,000 less than for June, and \$113,844,000 less than for July 1944.

Data on employment and pay rolls are received monthly by the Bureau of Labor Statistics directly from private shipyards. Data for United States navy yards are received monthly from the Navy Department. Employees in the navy yards are also included in data for the Federal executive service (tables 2 and 3).

TABLE 4.—Total Employment and Pay Rolls in United States Navy Yards and Private Shipyards, by Shipbuilding Region, July 1945

Shipbuilding region	Employment (in thousands)			Pay rolls (in thousands)		
	July 1945 ¹	June 1945	July 1944	July 1945 ¹	June 1945	July 1944
All regions.....	1,001.8	1,140.3	1,562.3	\$317,117	\$327,558	\$430,961
United States navy yards ²	316.9	315.8	326.2	95,365	93,591	91,036
Private shipyards.....	774.9	824.5	1,236.1	221,752	233,967	339,925
North Atlantic.....	419.3	438.4	562.5	123,445	138,383	(³)
South Atlantic.....	103.6	106.2	137.4	31,287	27,474	(³)
Gulf.....	130.6	137.0	213.3	35,254	36,041	(³)
Pacific.....	395.7	407.2	522.2	114,610	111,081	(³)
Great Lakes.....	25.2	30.7	63.5	7,814	8,137	(³)
Inland.....	17.4	20.8	63.4	4,707	6,442	(³)

¹ Preliminary.

² Includes all navy yards constructing or repairing ships, including the Curtis Bay (Md.) Coast Guard Yard. Data are also included in the Federal executive service (tables 2 and 3).

³ Break-down not available.

Construction Employment

In July 1945, for the first time since October 1943, there were more than a million persons employed on construction. The July total of 1,029,300 for all types of employment on construction was 59,800 above June and 172,400 above July a year ago. Both the increase during the month and the gain over the year were entirely on non-Federal projects, Federal construction employment having dropped 10,700 from June and 19,500 from July 1944.

July was the fourth consecutive month in which all types of non-Federal projects showed employment increases, with the greatest occurring in residential construction. The employment gain on private residential building in July was 24,900 (or 19 percent), followed closely by a rise of 22,000 (or 11 percent) on nonresidential building. Total non-Federal construction employment reached 677,800 during July, 66,000 more than in June and 209,200 more than in July 1944. The only type of non-Federal project not showing an employment gain over the year was construction of new State highways, on which 3,600 fewer persons were employed this July than last.

The 5-percent decrease during July in Federal construction employment is attributable principally to the drop of 9,300 in nonresidential building. In spite of the current downward trend, Federal nonresidential work was still one-fifth greater this month than it was a year ago. Employment dropped also on most other types of Federal construction, both during the month and over the year period.

The marked decline in construction on certain vital war projects (the identity of which has been withheld for security reasons) was solely responsible for the 11-percent drop from July 1944 in employment included in the "Other" classification in table 5. Employment on the maintenance of State roads increased 4,600 during July but remained practically unchanged from a year ago.

Source of data.—For construction projects financed wholly or partially from Federal funds, the Bureau of Labor Statistics receives monthly reports on employment and pay rolls at the construction site directly from the contractors or from the Federal agency sponsoring the project. Force-account employees hired directly by the Federal Government are also included in tables 2 and 3 under Federal executive service.

Estimates of employment on non-Federal construction projects (except State roads) are obtained by converting the value of work started (compiled from reports on building permits issued, priorities granted, and from certain special reports) into monthly expenditures and employment by means of factors which have been developed from special studies and adjusted to current conditions. For State roads projects, data represent estimates of the Public Roads Administration.

TABLE 5.—Estimated Employment and Pay Rolls on Construction Within Continental United States, July 1945

Type of project	Employment (in thousands)			Pay rolls (in thousands)		
	July 1945 ¹	June 1945	July 1944	July 1945 ¹	June 1945	July 1944
New construction, total ²	1,029.3	969.5	856.9	(3)	(3)	(3)
At the construction site.....	888.4	833.1	698.7	(3)	(3)	(3)
Federal projects ⁴	210.6	221.3	230.1	\$48,807	\$51,348	\$49,772
Airports.....	7.6	8.4	13.8	1,421	1,563	2,615
Buildings.....	157.0	167.0	145.4	38,287	40,682	32,772
Residential.....	10.5	11.2	23.8	2,541	2,701	5,123
Nonresidential ⁵	146.5	155.8	121.6	35,746	37,981	27,649
Electrification.....	.6	.7	.3	74	88	60
Reclamation.....	6.7	6.6	13.7	1,655	1,631	3,088
River, harbor, and flood control.....	12.7	13.1	19.8	2,464	2,539	4,054
Streets and highways.....	12.5	11.3	16.9	2,238	2,032	3,208
Water and sewer systems.....	2.9	3.0	4.8	548	575	685
Miscellaneous.....	10.6	11.2	15.4	2,120	2,238	3,290
Non-Federal projects.....	677.8	611.8	468.6	(3)	(3)	(3)
Buildings.....	379.9	333.0	197.0	89,656	79,587	45,310
Residential.....	157.9	133.0	113.1	(3)	(3)	(3)
Nonresidential.....	222.0	200.0	83.9	(3)	(3)	(3)
Farm dwellings and service buildings.....	123.3	113.9	122.5	(3)	(3)	(3)
Public utilities.....	121.2	117.6	100.2	(3)	(3)	(3)
Streets and highways.....	34.0	30.3	35.6	(3)	(3)	(3)
State.....	15.0	13.1	18.6	(3)	(3)	(3)
County and municipal.....	19.0	17.2	17.0	(3)	(3)	(3)
Miscellaneous.....	19.4	17.0	13.3	(3)	(3)	(3)
Other ⁶	140.9	136.4	158.2	(3)	(3)	(3)
Maintenance of State roads ⁷	95.0	90.4	94.8	(3)	(3)	(3)

¹ Preliminary.² Data are for all construction workers (contract and force-account) engaged on new construction, additions, and alterations, and on repair work of the type usually covered by building permits. (Force-account employees are workers hired directly by the owner and utilized as a separate work force to perform construction work of the type usually chargeable to capital account.) The construction figure included in the Bureau's nonagricultural employment series covers only employees of construction contractors and on Federal force-account and excludes force-account workers of State and local governments, public utilities, and private firms.³ Data not available.⁴ Includes the following force-account employees, hired directly by the Federal Government, and their pay rolls: July 1944, 29,062, \$5,906,000; June 1945, 18,326, \$3,603,000; July 1945, 17,313, \$3,238,000. These employees are also included under the Federal executive service (tables 2 and 3); all other workers were employed by contractors and subcontractors.⁵ Includes the following employees and pay rolls for Defense Plant Corporation (RFC) projects; July 1944, 33,899, \$8,541,000; June 1945, 15,549, \$3,717,000; July 1945, 14,300, \$3,418,000.⁶ Includes central office force of construction contractors, shop employees of special trades contractors, such as bench sheet-metal workers, etc., and site employees engaged on projects which, for security reasons, cannot be shown above.⁷ Data for other types of maintenance not available.

Detailed Reports for Industrial and Business Employment, June 1945

Nonagricultural Employment

ESTIMATES of employment in nonagricultural establishments are shown in table 1. The estimates are based on reports of employers to the Bureau of Labor Statistics, on unemployment-compensation data made available by the Bureau of Employment Security of the Federal Security Agency, and on information supplied by other Government agencies, such as the Interstate Commerce Commission, Civil Service Commission, Bureau of the Census, and the Bureau of Old-Age and Survivors Insurance. The estimates include all wage and salaried workers in nonagricultural establishments but exclude military personnel, proprietors, self-employed persons, and domestic servants.

Estimates of employees in nonagricultural establishments, by States, are published each month in a detailed report on employment and pay rolls.

TABLE 1.—Estimated Number of Employees in Nonagricultural Establishments, by Industry Division

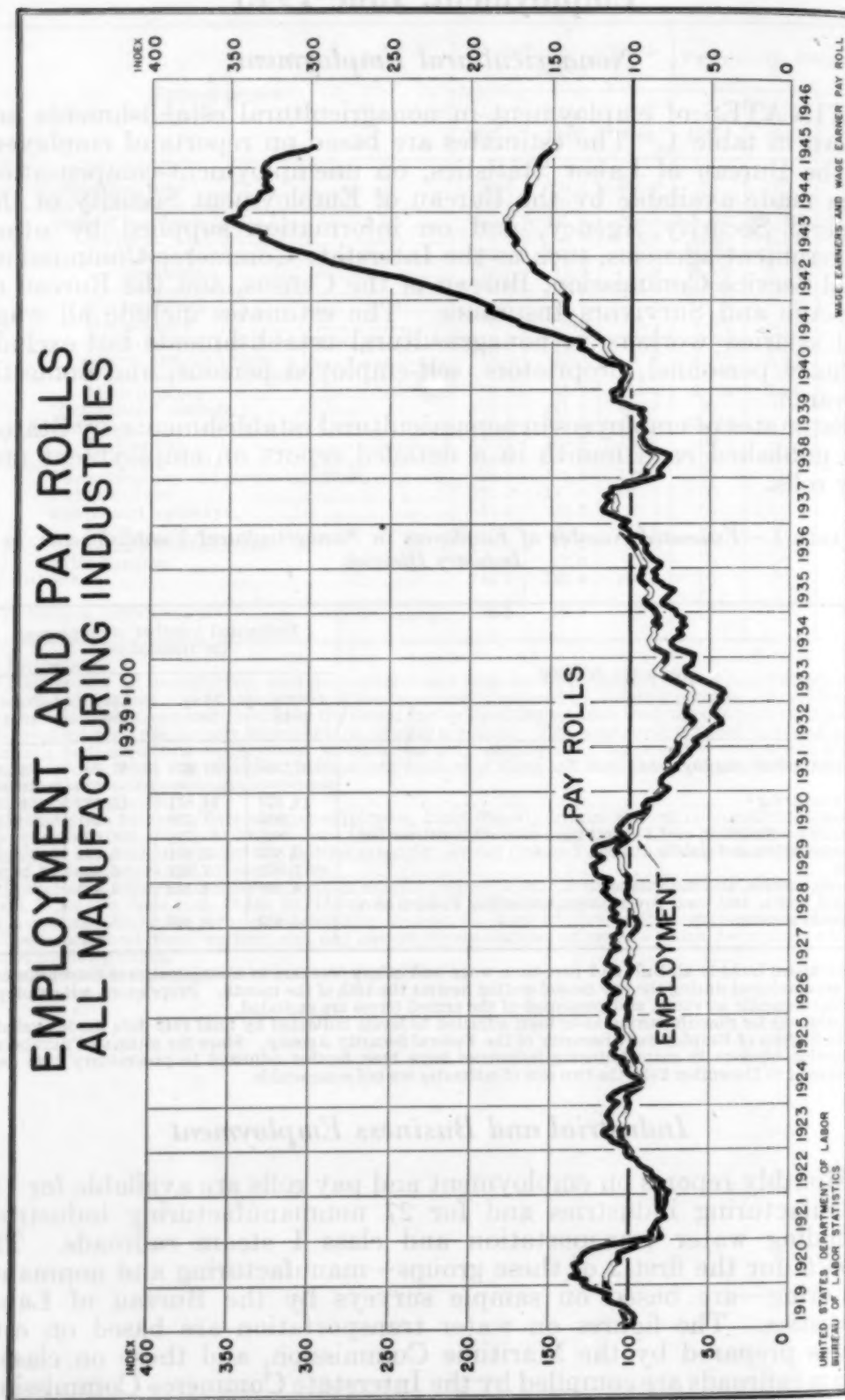
Industry division	Estimated number of employees (in thousands)			
	June 1945	May 1945	April 1945	June 1944
Total estimated employment ¹	37, 556	37, 678	37, 791	38, 846
Manufacturing ²	14, 523	14, 811	15, 102	16, 093
Mining	803	728	761	844
Contract construction and Federal force-account construction	848	798	690	691
Transportation and public utilities	3, 833	3, 801	3, 792	3, 803
Trade	7, 001	7, 021	6, 990	6, 977
Finance, service, and miscellaneous	4, 595	4, 513	4, 444	4, 542
Federal, State, and local government, excluding Federal force-account construction	5, 953	6, 006	6, 003	5, 896

¹ Estimates include all full- and part-time wage and salary workers in nonagricultural establishments who are employed during the pay period ending nearest the 15th of the month. Proprietors, self-employed persons, domestic servants, and personnel of the armed forces are excluded.

² Estimates for manufacturing have been adjusted to levels indicated by final 1942 data made available by the Bureau of Employment Security of the Federal Security Agency. Since the estimated numbers of production workers in manufacturing industries have been further adjusted to preliminary 1943 data, subsequent to December 1942, the two sets of estimates are not comparable.

Industrial and Business Employment

Monthly reports on employment and pay rolls are available for 154 manufacturing industries and for 27 nonmanufacturing industries, including water transportation and class I steam railroads. The reports for the first 2 of these groups—manufacturing and nonmanufacturing—are based on sample surveys by the Bureau of Labor Statistics. The figures on water transportation are based on estimates prepared by the Maritime Commission, and those on class I steam railroads are compiled by the Interstate Commerce Commission.



The employment, pay roll, hours, and earnings figures for manufacturing, mining, laundries, and cleaning and dyeing, cover production workers only; but the figures for public utilities, brokerage, insurance, and hotels relate to all employees except corporation officers and executives, while for trade they relate to all employees except corporation officers, executives, and other employees whose duties are mainly supervisory. For crude-petroleum production they cover production workers and clerical field force. The coverage of the reporting samples for the various nonmanufacturing industries ranges from about 25 percent for wholesale and retail trade, cleaning and dyeing, and insurance, to about 80 percent for public utilities and 90 percent for mining.

The general manufacturing indexes are computed from reports supplied by representative establishments in the 154 manufacturing industries surveyed. These reports cover more than 65 percent of the total production workers in all manufacturing industries of the country and about 80 percent of the production workers in the 154 industries covered.

Data for both manufacturing and nonmanufacturing industries are based on reports of the number of employees and the amount of pay rolls for the period ending nearest the 15th of the month.

INDEXES OF EMPLOYMENT AND PAY ROLLS

Employment and pay-roll indexes, for both manufacturing and nonmanufacturing industries, for April, May, and June, 1945, and for June 1944, are presented in tables 3 and 5.

The figures relating to all manufacturing industries combined, to the durable- and nondurable-goods divisions, and to the major industry groups, have been adjusted to levels indicated by final data for 1942 and preliminary data for 1943 made available by the Bureau of Employment Security of the Federal Security Agency. The Bureau of Employment Security data referred to are (a) employment totals reported by employers under State unemployment-compensation programs and (b) estimates of the number of employees not reported under the programs of some of these States, which do not cover small establishments. The latter estimates were obtained from tabulations prepared by the Bureau of Old-Age and Survivors Insurance, which obtains reports from all employers, regardless of size of establishment.

Not all industries in each major industry group are represented in the tables since minor industries are not canvassed by the Bureau. Furthermore, no attempt has been made to allocate among the separate industries the adjustments to unemployment-compensation data. Hence, the estimates for individual industries within a group do not in general add to the total for that group.

TABLE 2.—Estimated Number of Production Workers in Manufacturing Industries 1

Industry	Estimated number of production workers (in thousands)			
	June 1945	May 1945	April 1945	June 1944
All manufacturing.....	12,157	12,406	12,679	13,610
Durable goods.....	6,908	7,256	7,472	8,246
Nondurable goods.....	5,159	5,150	5,207	5,364
<i>Durable goods</i>				
Iron and steel and their products.....	1,553	1,606	1,631	1,672
Blast furnaces, steel works, and rolling mills.....	470.0	473.8	475.4	481.8
Gray-iron and semisteel castings.....	71.4	72.2	72.5	73.1
Malleable-iron castings.....	24.2	24.5	24.2	24.6
Steel castings.....	64.1	69.3	70.9	74.6
Cast-iron pipe and fittings.....	16.0	16.2	16.0	15.3
Tin cans and other tinware.....	42.3	41.3	41.7	39.8
Wire drawn from purchased rods.....	31.1	31.7	32.0	33.5
Wirework.....	31.8	32.6	33.9	35.0
Cutlery and edge tools.....	23.0	23.5	23.9	23.0
Tools (except edge tools, machine tools, files, and saws).....	26.2	26.3	26.8	27.7
Hardware.....	44.6	45.2	46.0	45.6
Plumbers' supplies.....	22.2	22.5	22.8	22.9
Stoves, oil burners, and heating equipment, not elsewhere classified.....	58.6	60.6	62.0	63.0
Steam and hot-water heating apparatus and steam fittings.....	51.3	53.3	54.3	56.3
Stamped and enameled ware and galvanizing.....	83.5	85.0	86.0	88.8
Fabricated structural and ornamental metalwork.....	59.7	63.5	67.5	76.2
Metal doors, sash, frames, molding, and trim.....	8.6	10.0	10.3	13.1
Bolts, nuts, washers, and rivets.....	23.1	23.3	23.6	27.0
Forgings, iron and steel.....	33.0	34.1	34.4	37.0
Wrought pipe, welded and heavy riveted.....	22.6	23.2	24.1	26.4
Screw-machine products and wood screws.....	39.5	41.5	42.4	45.9
Steel barrels, kegs, and drums.....	8.5	8.3	8.4	6.5
Firearms.....	23.4	29.0	29.8	48.8
Electrical machinery.....	657	670	682	745
Electrical equipment.....	403.1	411.2	419.7	456.0
Radios and phonographs.....	110.3	113.3	114.5	129.0
Communication equipment.....	101.1	102.3	103.5	112.9
Machinery, except electrical.....	1,088	1,108	1,130	1,210
Machinery and machine-shop products.....	424.1	432.4	441.4	468.0
Engines and turbines.....	61.9	63.2	65.2	71.3
Tractors.....	54.1	54.3	55.6	60.0
Agricultural machinery, excluding tractors.....	41.7	41.6	42.7	45.9
Machine tools.....	71.5	72.7	73.6	78.5
Machine-tool accessories.....	61.3	62.9	63.9	68.7
Textile machinery.....	25.8	26.2	25.9	27.2
Pumps and pumping equipment.....	66.4	67.7	68.9	80.9
Typewriters.....	13.0	13.0	13.0	11.1
Cash registers, adding and calculating machines.....	28.3	28.5	29.2	33.4
Washing machines, wringers and driers, domestic.....	11.5	12.5	12.8	13.7
Sewing machines, domestic and industrial.....	10.3	10.5	10.8	9.3
Refrigerators and refrigeration equipment.....	47.8	49.0	49.9	52.9
Transportation equipment, except automobiles.....	1,601	1,745	1,875	2,334
Locomotives.....	32.3	33.2	33.5	36.1
Cars, electric- and steam-railroad.....	58.2	59.4	57.9	58.4
Aircraft and parts, excluding aircraft engines.....	506.8	575.4	619.1	709.9
Aircraft engines.....	173.4	192.7	203.5	250.9
Shipbuilding and boatbuilding.....	738.7	783.6	853.9	1,152.3
Motorcycles, bicycles, and parts.....	9.5	9.5	9.6	9.5
Automobiles.....	611	634	659	703
Nonferrous metals and their products.....	390	401	404	423
Smelting and refining, primary, of nonferrous metals.....	38.0	38.6	39.2	49.1
Alloying and rolling and drawing of nonferrous metals, ex- cept aluminum.....	68.1	70.9	71.7	70.3
Clocks and watches.....	24.3	25.3	26.0	25.4
Jewelry (precious metals) and jewelers' findings.....	13.2	13.1	13.2	14.1
Silverware and plated ware.....	11.0	10.9	10.9	10.6
Lighting equipment.....	25.4	26.9	26.3	26.2
Aluminum manufactures.....	66.8	69.8	70.6	74.6
Sheet-metal work, not elsewhere classified.....	31.1	31.2	31.4	32.4
Lumber and timber basic products.....	443	443	438	476
Sawmills and logging camps.....	217.2	216.7	213.7	235.4
Planing and plywood mills.....	67.9	67.7	68.2	71.0

See footnote at end of table.

TABLE 2.—Estimated Number of Production Workers in Manufacturing Industries¹—Continued

Industry	Estimated number of production workers (in thousands)			
	June 1945	May 1945	April 1945	June 1944
<i>Durable goods—Continued</i>				
Furniture and finished lumber products.....	329	329	331	345
Mattresses and bedsprings.....	17.7	17.1	17.2	16.7
Furniture.....	147.5	147.9	149.3	157.7
Wooden boxes, other than cigar.....	26.1	26.2	26.6	28.2
Caskets and other morticians' goods.....	11.8	12.0	12.1	12.7
Wood preserving.....	10.0	10.0	10.0	10.0
Wood, turned and shaped.....	21.2	21.2	21.0	21.0
Stone, clay, and glass products.....	326	320	322	338
Glass and glassware.....	88.4	86.6	87.0	92.7
Glass products made from purchased glass.....	11.0	10.9	10.8	10.3
Cement.....	16.9	16.3	16.2	17.1
Brick, tile, and terra cotta.....	41.5	40.3	40.5	42.7
Pottery and related products.....	38.6	37.9	38.3	41.6
Gypsum.....	4.0	4.0	4.0	4.1
Wallboard, plaster (except gypsum), and mineral wool.....	9.3	9.3	9.3	9.4
Lime.....	7.6	7.7	7.6	8.2
Marble, granite, slate, and other products.....	13.1	13.1	13.1	12.7
Abrasives.....	21.5	21.2	21.4	21.7
Asbestos products.....	19.3	19.4	19.7	20.5
<i>Nondurable goods</i>				
Textile-mill products and other fiber manufactures.....	1,040	1,035	1,046	1,104
Cotton manufactures, except smallwares.....	413.8	411.4	415.9	435.8
Cotton smallwares.....	13.4	13.4	13.5	13.4
Silk and rayon goods.....	86.4	85.6	86.3	89.5
Woolen and worsted manufactures, except dyeing and finishing.....	140.4	140.6	142.1	151.3
Hosiery.....	97.0	96.2	97.0	106.2
Knitted cloth.....	10.1	10.0	10.2	10.6
Knitted outerwear and knitted gloves.....	27.4	27.5	27.9	29.6
Knitted underwear.....	33.6	33.1	33.4	36.1
Dyeing and finishing textiles, including woolen and worsted.....	57.2	57.2	57.6	60.8
Carpets and rugs, wool.....	19.5	19.2	19.6	20.3
Hats, fur-felt.....	9.0	9.1	9.1	9.4
Jute goods, except felts.....	3.2	3.2	3.2	3.3
Cordage and twine.....	14.3	14.5	14.6	15.4
Apparel and other finished textile products.....	795	801	819	867
Men's clothing, not elsewhere classified.....	196.3	195.6	198.0	213.8
Shirts, collars, and nightwear.....	48.6	47.9	48.5	53.8
Underwear and neckwear, men's.....	11.9	11.8	11.9	12.2
Work shirts.....	14.5	14.3	14.4	15.3
Women's clothing, not elsewhere classified.....	195.5	200.3	206.9	216.6
Corsets and allied garments.....	14.0	14.1	14.1	15.2
Millinery.....	16.0	16.8	19.6	16.9
Handkerchiefs.....	2.4	2.5	2.5	3.0
Curtains, draperies, and bedspreads.....	10.7	10.7	10.6	13.3
Housefurnishings, other than curtains, etc.....	11.2	11.2	10.7	10.2
Textile bags.....	14.9	14.8	14.6	14.3
Leather and leather products.....	307	303	305	313
Leather.....	39.1	38.6	38.8	40.3
Boot and shoe cut stock and findings.....	16.1	16.1	15.9	16.3
Boots and shoes.....	171.5	169.7	170.6	174.9
Leather gloves and mittens.....	11.7	11.6	11.7	12.8
Trunks and suitcases.....	12.7	11.9	12.1	11.7
Food.....	986	967	975	1,038
Slaughtering and meat packing.....	127.7	124.4	129.2	157.7
Butter.....	25.2	24.5	23.4	25.2
Condensed and evaporated milk.....	16.4	15.7	14.8	16.1
Ice cream.....	16.9	16.0	15.1	17.5
Flour.....	29.6	28.8	28.4	28.0
Feeds, prepared.....	22.4	21.0	21.1	19.8
Cereal preparations.....	9.3	9.3	9.4	9.3
Baking.....	254.7	254.7	254.7	257.4
Sugar refining, cane.....	14.0	14.7	15.3	14.6
Sugar, beet.....	4.3	4.5	4.0	4.2
Confectionery.....	53.7	54.0	56.0	56.4
Beverages, nonalcoholic.....	26.4	26.4	26.4	30.5
Malt liquors.....	51.6	50.1	49.9	50.8
Canning and preserving.....	105.9	98.7	101.6	110.5

See footnote at end of table.

TABLE 2.—Estimated Number of Production Workers in Manufacturing Industries¹—Continued

Industry	Estimated number of production workers (in thousands)			
	June 1945	May 1945	April 1945	June 1944
<i>Nondurable goods—Continued</i>				
Tobacco manufactures.....	80	80	81	83
Cigarettes.....	33.9	33.9	34.4	34.3
Cigars.....	33.0	32.6	32.9	36.2
Tobacco (chewing and smoking) and snuff.....	8.3	8.3	8.6	7.7
Paper and allied products.....	303	299	301	311
Paper and pulp.....	144.2	142.7	143.8	145.9
Paper goods, other.....	43.4	43.1	43.8	46.1
Envelopes.....	9.4	9.2	9.3	9.6
Paper bags.....	12.7	12.6	12.6	13.4
Paper boxes.....	76.7	75.3	75.8	79.0
Printing, publishing, and allied industries.....	327	326	326	330
Newspapers and periodicals.....	109.4	109.2	108.8	110.4
Printing, book and job.....	131.1	131.3	131.4	132.1
Lithographing.....	24.1	24.1	24.0	25.0
Bookbinding.....	27.3	27.2	27.1	28.2
Chemicals and allied products.....	612	623	633	584
Paints, varnishes, and colors.....	29.1	28.8	28.9	29.9
Drugs, medicines, and insecticides.....	50.3	50.0	50.2	50.6
Perfumes and cosmetics.....	12.3	12.2	12.2	11.5
Soap.....	13.1	13.2	13.2	13.5
Rayon and allied products.....	53.8	53.1	53.1	52.3
Chemicals, not elsewhere classified.....	114.7	114.1	114.7	119.5
Explosives and safety fuses.....	49.6	97.9	98.5	72.8
Compressed and liquefied gases.....	6.0	5.9	6.0	6.2
Ammunition, small-arms.....	64.3	66.1	67.4	49.8
Fireworks.....	20.0	22.0	22.9	31.1
Cottonseed oil.....	12.1	13.3	14.5	11.8
Fertilizers.....	20.9	23.7	27.1	19.5
Products of petroleum and coal.....	134	134	133	132
Petroleum refining.....	92.7	92.2	91.8	88.7
Coke and byproducts.....	21.8	21.8	21.8	23.0
Paving materials.....	1.7	1.7	1.6	1.8
Roofing materials.....	9.4	9.2	9.5	9.6
Rubber products.....	186	189	192	193
Rubber tires and inner tubes.....	90.2	91.6	93.2	89.2
Rubber boots and shoes.....	17.0	16.8	16.9	20.0
Rubber goods, other.....	67.9	69.4	71.3	72.3
Miscellaneous industries.....	389	393	396	409
Instruments (professional and scientific) and fire-control equipment.....	56.6	59.1	59.7	62.5
Photographic apparatus.....	27.0	27.3	27.4	29.2
Optical instruments and ophthalmic goods.....	22.8	23.2	23.3	24.5
Pianos, organs, and parts.....	8.0	7.8	7.5	6.8
Games, toys, and dolls.....	15.4	15.4	15.6	15.9
Buttons.....	9.2	9.5	9.6	9.6
Fire extinguishers.....	4.3	4.5	4.6	5.8

¹ Estimates for the major industry groups have been adjusted to levels indicated by final 1942 and preliminary 1943 data made available by the Bureau of Employment Security of the Federal Security Agency. Estimates for individual industries have been adjusted to levels indicated by the 1939 Census of Manufactures, but not to Federal Security Agency data. For this reason, together with the fact that this Bureau has not prepared estimates for certain industries, the sum of the individual industry estimates will not agree with totals shown for the major industry groups. The term "production worker" has been substituted for the term "wage earner" which has been used in our previous reports. This conforms with the terminology and standard definitions of classes of workers in manufacturing industries formulated by the Division of Statistical Standards of the U. S. Bureau of the Budget. The use of "production worker" in place of "wage earner" has no appreciable effect on the employment estimates since there is very little difference in the definitions.

TABLE 3.—Indexes of Production-Worker Employment and Pay Rolls in Manufacturing Industries ¹

Industry	Employment indexes (1939 average=100)				Pay-roll indexes (1939 average=100)			
	June 1945	May 1945	April 1945	June 1944	June 1945	May 1945	April 1945	June 1944
All manufacturing.....	148.4	151.4	154.8	166.1	298.3	302.7	317.0	334.6
Durable goods.....	193.8	200.9	206.9	228.4	393.6	406.9	430.4	469.0
Nondurable goods.....	112.6	112.4	113.7	117.1	205.1	200.8	206.1	203.2
<i>Durable goods</i>								
Iron and steel and their products.....	156.7	162.0	164.5	168.7	293.9	304.1	314.2	313.3
Blast furnaces, steel works, and rolling mills.....	121.0	122.0	122.4	124.0	222.8	227.1	228.5	224.5
Gray-iron and semisteel castings.....	122.2	123.5	124.0	125.2	250.0	251.0	257.7	248.9
Malleable-iron castings.....	134.0	135.9	134.3	136.6	277.7	279.1	283.5	280.5
Steel castings.....	213.2	230.3	235.5	248.0	389.4	421.8	451.2	452.5
Cast-iron pipe and fittings.....	96.6	97.9	97.0	92.4	199.3	193.5	193.4	175.3
Tin cans and other tinware.....	133.2	129.9	131.3	125.3	229.8	213.1	227.5	206.6
Wire drawn from purchased rods.....	141.6	144.2	145.6	152.4	231.4	239.6	252.8	251.4
Wirework.....	104.6	107.2	111.5	115.3	204.2	208.9	225.6	230.7
Cutlery and edge tools.....	149.0	152.7	155.1	149.5	304.6	308.2	323.9	310.8
Tools (except edge tools, machine tools, files, and saws).....	171.4	171.7	174.7	180.7	326.4	322.8	342.7	338.9
Hardware.....	125.0	126.8	128.9	128.1	263.0	268.4	275.0	263.3
Plumbers' supplies.....	89.9	91.4	92.5	92.9	163.2	171.7	177.4	170.6
Stoves, oil burners, and heating equipment, not elsewhere classified.....	127.1	131.4	134.4	136.6	243.9	246.9	264.6	258.8
Steam and hot-water heating apparatus and steam fittings.....	169.4	176.0	179.2	185.8	325.5	334.4	348.0	346.1
Stamped and enameled ware and galvanizing.....	150.4	153.0	154.8	159.9	304.1	312.5	323.0	322.7
Fabricated structural and ornamental metal-work.....	168.0	178.8	190.1	214.4	317.8	340.8	364.6	420.7
Metal doors, sash, frames, molding, and trim.....	111.1	128.6	133.4	169.0	216.0	239.6	260.2	313.3
Bolts, nuts, washers, and rivets.....	161.7	163.0	165.3	188.4	323.3	328.1	334.6	366.7
Forgings, iron and steel.....	214.9	221.6	223.9	240.6	422.4	431.5	460.8	474.1
Wrought pipe, welded and heavy riveted.....	270.4	276.8	287.9	314.9	597.6	585.5	614.1	614.7
Screw-machine products and wood screws.....	233.5	245.4	250.3	271.2	462.1	476.7	501.4	529.8
Steel barrels, kegs, and drums.....	139.2	136.0	138.2	106.3	308.5	260.8	294.3	209.5
Firearms.....	468.0	579.8	596.6	975.9	1028.0	1299.6	1299.3	2248.8
Electrical machinery.....	253.6	258.7	263.2	287.7	466.2	476.8	493.8	518.9
Electrical equipment.....	223.0	227.5	232.2	252.3	415.1	425.5	440.8	464.6
Radios and phonographs.....	253.5	260.4	263.1	296.4	486.3	501.1	520.6	559.5
Communication equipment.....	314.9	318.4	322.3	351.4	532.2	535.0	552.1	559.2
Machinery, except electrical.....	205.9	209.6	213.8	229.0	387.5	385.8	407.0	434.1
Machinery and machine-shop products.....	209.6	213.7	218.2	231.3	386.4	386.4	409.8	429.1
Engines and turbines.....	332.0	338.6	349.3	382.0	679.9	682.9	732.4	832.8
Tractors.....	173.1	173.8	177.8	191.9	274.8	272.0	278.4	304.0
Agricultural machinery, excluding tractors.....	149.8	149.4	153.4	165.2	303.8	288.7	312.5	335.6
Machine tools.....	195.2	198.4	200.9	214.4	353.4	347.6	370.9	383.8
Machine-tool accessories.....	243.7	249.8	253.8	273.0	421.5	429.9	448.7	474.6
Textile machinery.....	118.0	119.4	118.4	124.1	227.7	223.9	228.8	230.2
Pumps and pumping equipment.....	274.0	279.3	284.4	333.8	584.7	576.2	593.2	711.7
Typewriters.....	80.4	79.9	80.1	68.7	167.7	166.0	164.4	141.0
Cash registers, adding and calculating machines.....	143.9	144.7	148.6	169.5	278.5	273.8	287.5	334.3
Washing machines, wringers and driers, domestic.....	153.6	167.3	171.7	184.2	281.8	287.7	327.0	331.4
Sewing machines, domestic and industrial.....	131.1	134.4	137.3	119.0	271.4	270.7	292.1	259.8
Refrigerators and refrigeration equipment.....	136.0	139.4	141.9	150.5	250.1	249.9	260.2	269.7
Transportation equipment, except automobiles.....	1008.6	1099.4	1181.3	1470.7	2117.5	2284.5	2496.6	3028.8
Locomotives.....	499.7	512.5	518.0	558.6	1086.4	1167.8	1194.1	1265.9
Cars, electric- and steam-railroad.....	237.3	242.2	236.3	238.0	485.6	485.4	487.1	476.4
Aircraft and parts, excluding aircraft engines.....	1277.3	1450.4	1560.4	1789.3	2542.5	2837.0	3070.7	3433.2
Aircraft engines.....	1949.7	2167.0	2288.8	2822.1	3231.9	3703.0	3957.0	4993.3
Shipbuilding and boatbuilding.....	1066.8	1131.6	1233.2	1664.2	2327.7	2433.6	2711.2	3497.7
Motorcycles, bicycles, and parts.....	135.9	135.6	137.5	136.0	257.6	265.9	268.2	249.7
Automobiles.....	151.8	157.5	163.7	174.6	268.0	278.5	302.9	325.3
Nonferrous metals and their products.....	170.0	174.9	176.3	185.4	322.0	331.3	343.9	349.0
Smelting and refining, primary, of nonferrous metals.....	140.6	139.8	141.8	177.5	262.1	261.5	269.1	334.2
Alloying and rolling and drawing of nonferrous metals, except aluminum.....	175.5	182.6	184.6	181.1	328.4	340.7	362.3	340.3
Clocks and watches.....	119.9	124.6	128.3	125.1	251.7	265.1	278.5	260.9
Jewelry (precious metals) and jewelers' findings.....	91.3	91.1	91.3	97.4	161.0	158.5	162.9	160.0
Silverware and plated ware.....	90.5	89.5	89.4	87.3	162.5	162.4	165.8	159.8
Lighting equipment.....	124.2	131.5	128.5	127.9	232.2	242.0	236.2	231.3
Aluminum manufactures.....	283.5	296.3	300.0	316.7	497.4	523.5	554.0	566.5
Sheet-metal work, not elsewhere classified.....	166.0	166.2	167.5	172.6	323.8	320.0	318.4	319.6

See footnotes at end of table.

TABLE 3.—Indexes of Production-Worker Employment and Pay Rolls in Manufacturing Industries¹—Continued

Industry	Employment indexes (1939 average=100)				Pay-roll indexes (1939 average=100)			
	June 1945	May 1945	April 1945	June 1944	June 1945	May 1945	April 1945	June 1944
<i>Durable goods—Continued</i>								
Lumber and timber basic products.....	105.4	105.3	104.3	113.3	203.9	196.7	196.3	215.8
Sawmills and logging camps.....	75.4	75.3	74.2	81.7	148.4	142.4	141.2	159.3
Planing and plywood mills.....	93.4	93.2	93.9	97.7	167.4	164.0	166.5	170.1
Furniture and finished lumber products.....	100.2	100.2	101.0	105.3	189.1	187.7	191.6	190.8
Mattresses and bedsprings.....	96.3	93.2	93.8	90.9	176.1	168.5	165.9	156.7
Furniture.....	92.7	92.9	93.8	99.0	173.3	173.0	177.4	177.9
Wooden boxes, other than cigar.....	103.0	103.5	105.1	111.2	213.4	207.9	210.9	220.4
Caskets and other morticians' goods.....	95.0	96.1	97.3	102.4	165.0	172.5	177.7	173.7
Wood preserving.....	88.8	88.5	88.6	88.9	198.1	195.6	196.5	191.0
Wood, turned and shaped.....	96.5	96.3	95.6	95.4	180.3	174.9	177.1	172.7
Stone, clay, and glass products.....	111.0	109.1	109.7	115.0	191.4	187.9	193.3	191.9
Glass and glassware.....	126.6	124.0	124.6	132.8	200.8	199.8	206.1	209.7
Glass products made from purchased glass.....	110.2	108.9	107.8	103.2	192.1	191.4	189.2	168.1
Cement.....	71.1	68.6	67.9	71.7	120.8	114.0	114.5	110.6
Brick, tile, and terra cotta.....	73.0	71.0	71.4	75.2	126.2	121.1	124.1	122.8
Pottery and related products.....	116.5	114.6	115.8	125.5	186.1	183.6	188.6	196.3
Gypsum.....	81.9	80.1	81.8	82.9	142.8	133.5	141.9	145.4
Wallboard, plaster (except gypsum), and mineral wool.....	114.1	114.3	114.0	116.1	213.8	209.9	220.5	211.5
Lime.....	80.2	80.9	80.7	86.2	164.3	159.2	166.0	170.4
Marble, granite, slate, and other products.....	70.7	70.7	70.9	68.7	114.1	109.7	117.5	104.5
Abrasives.....	277.8	273.5	277.0	280.5	475.4	481.0	483.9	459.3
Asbestos products.....	121.3	122.4	123.9	129.3	253.9	246.7	259.2	257.1
<i>Nondurable goods</i>								
Textile-mill products and other fiber manufactures.....	90.9	90.5	91.4	96.6	172.2	164.3	168.3	172.3
Cotton manufactures, except smallwares.....	104.5	103.9	105.0	110.0	210.3	200.2	201.8	204.7
Cotton smallwares.....	100.6	100.7	101.6	100.3	199.9	186.9	193.9	180.7
Silk and rayon goods.....	72.1	71.4	72.0	74.7	142.1	133.7	134.6	135.8
Woolen and worsted manufactures, except dyeing and finishing.....	94.1	94.2	95.2	101.4	186.7	178.9	186.8	194.8
Hosiery.....	61.0	60.5	61.0	66.8	100.0	95.3	98.8	105.7
Knitted cloth.....	92.1	91.2	93.0	97.0	168.6	160.9	165.3	165.6
Knitted outerwear and knitted gloves.....	97.6	97.9	99.1	105.2	189.4	184.8	189.1	189.1
Knitted underwear.....	87.2	85.8	86.6	93.7	166.4	159.5	165.5	168.9
Dyeing and finishing textiles, including woolen and worsted.....	85.6	85.5	86.1	90.9	147.3	141.1	147.5	150.7
Carpets and rugs, wool.....	76.2	75.2	76.4	79.3	137.4	126.3	137.4	135.5
Hats, fur-felt.....	61.6	62.3	62.7	64.7	118.2	122.7	115.9	120.7
Jute goods, except felts.....	89.4	88.9	88.8	92.3	176.0	175.4	174.9	177.5
Cordage and twine.....	118.0	119.6	120.7	127.0	230.4	227.8	231.6	232.6
Apparel and other finished textile products.....	100.7	101.4	103.7	109.8	180.1	178.5	193.0	186.4
Men's clothing, not elsewhere classified.....	89.8	89.5	90.6	97.8	164.2	156.6	167.1	166.5
Shirts, collars, and nightwear.....	68.9	68.0	68.8	76.4	126.7	123.2	128.8	135.0
Underwear and neckwear, men's.....	73.4	73.2	73.7	75.7	153.7	149.1	154.4	148.4
Work shirts.....	107.8	106.5	107.2	113.9	208.0	201.6	208.8	204.4
Women's clothing, not elsewhere classified.....	72.0	73.7	76.2	79.7	125.8	131.1	143.6	134.8
Corsets and allied garments.....	74.5	74.9	75.4	80.9	134.6	131.0	132.2	141.0
Millinery.....	65.9	69.0	80.7	69.7	91.4	84.2	125.8	90.7
Handkerchiefs.....	50.2	50.7	51.8	61.8	95.9	96.8	96.0	109.6
Curtains, draperies, and bedspreads.....	63.3	63.5	62.7	78.7	135.8	133.2	129.4	157.0
Housefurnishings, other than curtains, etc.....	105.8	105.5	100.3	96.1	196.4	194.1	195.4	174.9
Textile bags.....	124.3	123.5	122.2	119.3	212.9	210.7	212.9	192.1
Leather and leather products.....	88.6	87.4	87.9	90.3	168.1	158.9	164.7	158.6
Leather.....	82.7	81.7	82.1	85.3	149.3	147.3	148.3	148.2
Boot and shoe cut stock and findings.....	85.6	85.2	84.5	86.4	152.5	147.1	150.5	144.3
Boots and shoes.....	78.7	77.8	78.2	80.2	154.1	143.2	150.4	142.8
Leather gloves and mittens.....	116.9	116.5	117.2	128.6	210.9	207.9	210.6	215.2
Trunks and suitcases.....	152.7	142.4	145.2	140.2	256.5	242.8	245.8	226.1
Food.....	115.4	113.2	114.1	121.5	194.2	186.0	187.4	197.6
Slaughtering and meat packing.....	106.0	103.3	107.2	130.9	177.9	162.5	167.7	217.5
Butter.....	140.6	136.4	130.4	140.2	230.6	216.0	210.5	216.8
Condensed and evaporated milk.....	169.2	161.6	152.7	165.6	302.2	279.3	260.6	280.1
Ice cream.....	107.9	101.9	96.0	111.4	156.0	145.0	142.2	153.6
Flour.....	119.3	116.3	114.5	113.0	211.0	202.0	201.1	187.5
Feeds, prepared.....	145.1	136.5	137.1	128.4	260.3	238.6	242.6	221.0

See footnotes at end of table.

TABLE 3.—*Indexes of Production-Worker Employment and Pay Rolls in Manufacturing Industries*—Continued

Industry	Employment indexes (1939 average=100)				Pay-roll indexes (1939 average=100)			
	June 1945	May 1945	April 1945	June 1944	June 1945	May 1945	April 1945	June 1944
<i>Nondurable goods—Continued</i>								
Food—Continued.								
Cereal preparations.....	124.7	125.0	125.7	125.0	231.0	226.3	232.5	219.4
Baking.....	110.4	110.4	110.4	111.6	174.1	171.9	170.4	166.8
Sugar refining, cane.....	90.1	104.0	108.2	103.3	155.4	168.8	182.5	166.3
Sugar, beet.....	41.6	43.6	38.3	40.1	65.1	65.6	61.6	62.7
Confectionery.....	108.0	108.5	112.6	113.5	187.4	184.8	191.8	185.8
Beverages, nonalcoholic.....	124.4	124.1	124.1	143.5	169.7	167.2	164.9	193.8
Malt liquors.....	143.1	139.0	138.3	140.8	219.9	205.6	206.8	210.0
Canning and preserving.....	78.8	73.4	75.5	82.2	154.6	144.4	150.0	156.7
Tobacco manufactures.....	85.9	85.4	86.7	89.4	164.1	156.8	160.4	157.4
Cigarettes.....	123.5	123.5	125.3	125.2	204.4	192.1	200.2	189.2
Cigars.....	64.8	64.1	64.6	71.2	136.8	132.7	131.3	141.0
Tobacco (chewing and smoking) and snuff.....	90.5	90.7	93.3	83.8	150.2	145.3	154.6	124.6
Paper and allied products.....	114.0	112.6	113.6	117.0	194.3	187.4	192.8	191.2
Paper and pulp.....	104.9	103.8	104.6	106.2	183.8	177.5	182.0	179.8
Paper goods, other.....	115.2	114.5	116.5	122.5	192.5	185.5	194.0	194.1
Envelopes.....	108.3	106.0	107.5	110.6	172.0	167.9	170.6	171.0
Paper bags.....	115.0	113.3	113.4	121.0	198.2	192.5	199.6	200.0
Paper boxes.....	110.9	108.9	109.5	114.2	182.8	175.2	180.3	178.7
Printing, publishing, and allied industries.....	99.6	99.5	99.4	100.7	142.5	141.8	141.1	137.3
Newspapers and periodicals.....	92.2	92.1	91.7	93.1	121.7	122.4	120.7	117.1
Printing, book and job.....	103.8	103.9	104.0	104.6	155.6	154.4	155.5	149.5
Lithographing.....	92.6	92.6	92.4	96.1	137.5	135.5	133.1	137.3
Bookbinding.....	106.0	105.5	105.2	109.5	186.3	180.3	178.9	180.5
Chemicals and allied products.....	212.5	216.3	219.8	202.7	381.3	388.9	391.3	355.1
Paints, varnishes, and colors.....	103.2	102.4	102.6	106.4	171.3	166.6	167.8	169.1
Drugs, medicines, and insecticides.....	183.5	182.5	183.0	184.6	284.6	282.0	277.1	266.7
Perfumes and cosmetics.....	118.4	117.9	117.6	111.1	171.4	163.0	166.7	158.6
Soap.....	96.6	97.4	97.5	99.2	163.1	164.7	165.9	168.3
Rayon and allied products.....	111.4	109.9	109.9	108.3	185.5	183.2	181.2	174.1
Chemicals, not elsewhere classified.....	164.8	164.1	164.9	171.8	298.5	295.2	295.6	296.5
Explosives and safety fuses.....	1304.3	1349.3	1357.7	1004.2	1984.3	2096.3	2075.7	1563.3
Compressed and liquefied gases.....	150.3	149.2	151.3	157.6	264.6	268.1	274.7	275.8
Ammunition, small-arms.....	1507.7	1549.1	1581.2	1168.0	3037.4	3185.2	3149.9	2358.6
Fireworks.....	1729.8	1897.9	1975.6	2689.0	4789.5	5294.0	5490.6	7185.7
Cottonseed oil.....	79.5	87.5	95.2	77.9	164.4	183.6	202.5	148.8
Fertilizers.....	111.5	126.2	144.6	103.7	258.8	292.6	351.3	227.7
Products of petroleum and coal.....	126.8	126.3	126.0	124.2	229.5	226.9	229.5	215.5
Petroleum refining.....	127.3	126.5	126.1	121.8	224.4	222.6	227.2	207.5
Coke and byproducts.....	100.3	100.3	100.3	106.1	189.9	186.1	178.9	187.5
Paving materials.....	69.8	70.5	65.7	72.7	144.3	132.8	124.1	147.7
Roofing materials.....	116.3	114.8	117.8	118.7	218.3	209.2	222.3	216.4
Rubber products.....	153.6	155.9	159.1	159.2	284.2	280.6	296.4	281.4
Rubber tires and inner tubes.....	166.7	169.2	172.2	164.8	293.8	288.6	306.0	278.5
Rubber boots and shoes.....	114.5	113.3	114.3	134.6	217.1	208.3	219.2	245.9
Rubber goods, other.....	131.2	134.1	137.7	139.8	242.7	243.9	256.1	251.2
Miscellaneous industries.....	159.1	160.7	161.8	167.0	312.3	312.8	322.2	320.7
Instruments (professional and scientific) and fire-control equipment.....	511.7	534.3	540.1	565.5	987.6	995.6	1070.4	1097.4
Photographic apparatus.....	156.5	157.9	158.7	168.8	262.5	265.4	270.1	273.0
Optical instruments and ophthalmic goods.....	196.3	199.6	200.5	211.1	337.7	344.3	347.5	356.2
Pianos, organs, and parts.....	105.2	103.0	98.4	89.1	207.4	197.3	190.3	170.9
Games, toys, and dolls ¹	82.3	82.8	83.7	85.1	164.7	164.2	172.0	167.2
Buttons.....	83.7	86.8	87.1	87.7	169.7	172.1	176.6	172.2
Fire extinguishers.....	434.8	454.7	460.0	580.3	969.5	1028.2	1065.9	1167.0

¹ Indexes for the major industry groups have been adjusted to levels indicated by final 1942 and preliminary 1943 data made available by the Bureau of Employment Security of the Federal Security Agency. Indexes for individual industries have been adjusted to levels indicated by the 1939 Census of Manufactures, but not to Federal Security Agency data. The term "production worker" has been substituted for the term "wage earner" which has been used in our previous reports. This conforms with the terminology and standard definitions of classes of workers in manufacturing industries formulated by the Division of Statistical Standards of the U. S. Bureau of the Budget. The use of "production worker" in place of "wage earner" has no appreciable effect on the employment and pay-roll indexes since there is very little difference in the definitions.

² Revisions have been made as follows in the indexes for earlier months:

Games, toys, and dolls.—February and March 1945 pay-roll indexes to 185.6 and 180.5.

TABLE 4.—*Estimated Number of Production Workers in Selected Nonmanufacturing Industries*¹

Industry	Estimated number of production workers (in thousands)			
	June 1945	May 1945	April 1945	June 1944
Mining:				
Anthracite.....	65.3	8.0	64.1	68.8
Bituminous coal.....	331	327	305	356
Metal.....	67.0	68.2	68.6	80.3
Iron.....	24.3	24.6	24.2	28.1
Copper.....	20.9	21.4	21.7	26.7
Lead and zinc.....	14.0	14.3	14.5	16.1
Gold and silver.....	5.2	5.3	5.5	5.7
Miscellaneous.....	2.6	2.6	2.7	3.7
Telephone ²	(3)	(3)	(3)	(3)
Telegraph ³	44.4	44.2	44.4	46.3
Electric light and power ⁴	202	200	200	203
Street railways and busses ⁵	227	228	229	231
Hotels (year-round) ⁶	353	350	348	353
Power laundries.....	(3)	(3)	(3)	(3)
Cleaning and dyeing.....	(3)	(3)	(3)	(3)
Class I steam railroads ⁷	1,454	1,427	1,421	1,447
Water transportation ⁸	159	159	155	125

¹ The term "production worker" has been substituted for the term "wage earner" which has been used in our previous reports. This conforms with the terminology and standard definitions of classes of workers formulated by the Division of Statistical Standards of the U. S. Bureau of the Budget. The use of "production worker" in place of "wage earner" has no appreciable effect on the employment estimates in mining industries since there is very little difference in the definitions. In the power laundries and cleaning and dyeing industries, the omission of driver-salesmen causes a significant difference. New series are being prepared.

² Data include salaried personnel.

³ Not available.

⁴ Excludes messengers, and approximately 6,000 employees of general and divisional headquarters and of cable companies. Data include salaried personnel.

⁵ Source: Interstate Commerce Commission. Data include salaried personnel.

⁶ Based on estimates prepared by the U. S. Maritime Commission covering employment on active deep-sea American-flag steam and motor merchant vessels of 1,000 gross tons and over. Excludes vessels under bareboat charter to, or owned by, the Army or Navy.

TABLE 5.—Indexes of Employment and Pay Rolls in Selected Nonmanufacturing Industries

Industry	Employment indexes (1939 average=100)				Pay-roll indexes (1939 average=100)			
	June 1945	May 1945	April 1945	June 1944	June 1945	May 1945	April 1945	June 1944
Mining:								
Anthracite.....	78.9	9.7	77.4	83.0	156.2	14.3	135.1	151.8
Bituminous coal.....	89.3	88.2	82.2	96.1	226.5	204.5	154.3	217.9
Metal.....	76.0	77.3	77.8	91.1	128.5	128.6	131.2	145.7
Iron.....	120.3	121.7	120.7	139.4	215.6	215.1	213.0	226.2
Copper.....	87.7	89.9	90.9	112.1	151.0	151.3	155.5	183.1
Lead and zinc.....	90.3	92.0	93.1	103.7	171.0	172.0	177.7	191.5
Gold and silver.....	21.2	21.5	22.3	23.1	27.1	27.3	29.8	30.7
Miscellaneous.....	66.2	66.6	67.2	93.9	111.4	110.4	113.1	159.3
Quarrying and nonmetallic.....	80.5	78.3	77.7	85.8	158.8	150.8	151.2	162.2
Crude-petroleum production ¹	83.6	82.8	82.7	83.6	136.1	132.4	131.8	131.1
Public utilities:								
Telephone.....	(2)	(2)	(2)	128.5	(2)	(2)	(2)	153.2
Telegraph.....	117.9	117.4	117.9	123.1	175.3	174.0	169.9	177.9
Electric light and power.....	82.8	82.0	82.0	83.1	119.2	117.5	117.4	114.8
Street railways and busses.....	117.2	117.7	118.3	119.1	177.6	175.7	174.2	170.4
Wholesale trade.....	94.4	94.5	94.9	95.0	141.9	140.8	144.4	135.4
Retail trade.....	96.2	96.9	96.7	96.6	134.2	131.0	132.0	127.4
Food.....	101.0	103.0	103.6	106.3	142.8	139.3	139.7	139.6
General merchandise.....	111.2	112.7	111.8	107.7	148.3	144.0	143.5	136.6
Apparel.....	106.6	107.7	106.9	108.8	152.8	149.0	148.5	145.4
Furniture and housefurnishings.....	62.2	61.6	61.1	63.6	89.9	89.0	88.7	88.4
Automotive.....	68.3	68.0	68.5	66.0	105.3	102.8	106.2	96.7
Lumber and building materials.....	92.4	90.7	90.4	91.4	138.0	135.2	135.6	128.7
Hotels (year-round) ²	109.5	108.5	108.0	109.4	171.5	167.9	165.6	157.2
Power laundries.....	107.2	104.9	104.7	112.4	166.3	161.9	162.5	163.6
Cleaning and dyeing.....	122.1	119.8	119.7	126.9	199.9	191.4	194.0	195.7
Class I steam railroads ³	147.2	144.4	143.8	146.5	(2)	(2)	(2)	(2)
Water transportation ⁴	303.0	303.5	295.5	238.9	744.5	746.2	729.2	571.7

¹ Does not include well drilling or rig building.² Not available.³ Cash payments only; additional value of board, room, and tips, not included.⁴ Source: Interstate Commerce Commission.⁵ Based on estimates prepared by the U. S. Maritime Commission covering employment on active deep-sea American-flag steam and motor merchant vessels of 1,000 gross tons and over. Excludes vessels under bareboat charter to or owned by the Army or Navy.

AVERAGE EARNINGS AND HOURS

Average weekly earnings and hours and average hourly earnings for April, May, and June 1945, where available, are given in table 6 for both manufacturing and nonmanufacturing industries. (For trend of factory earnings since 1939, see page 531 of this issue.)

The average weekly earnings for individual industries are computed by dividing the weekly pay rolls in the reporting establishments by the total number of full- and part-time employees reported. As not all reporting establishments supply information on man-hours, the average hours worked per week and average hourly earnings shown in this table are necessarily based on data furnished by a slightly smaller number of reporting firms. Because of variation in the size and composition of the reporting sample, the average hours per week, average hourly earnings, and average weekly earnings shown may not be strictly comparable from month to month. The sample, however, is believed to be sufficiently adequate in virtually all instances to indicate the general movement of earnings and hours over the period shown. The average weekly hours and hourly earnings for the manufacturing groups are weighted arithmetic means of the averages for the individual industries, estimated employment being used as weights for weekly hours and estimated aggregate hours as weights for hourly

earnings. The average weekly earnings for these groups are computed by multiplying the average weekly hours by the corresponding average hourly earnings.

TABLE 6.—Hours and Earnings in Manufacturing and Nonmanufacturing Industries
MANUFACTURING

Industry	Average weekly earnings ¹			Average weekly hours ¹			Average hourly earnings ¹		
	June 1945	May 1945	April 1945	June 1945	May 1945	April 1945	June 1945	May 1945	April 1945
All manufacturing.....	\$46.35	\$46.01	\$47.12	44.6	44.1	45.1	Cents 103.9	Cents 104.3	Cents 104.4
Durable goods.....	51.79	51.55	52.90	45.8	45.4	46.5	113.1	113.4	113.8
Nondurable goods.....	38.96	38.21	38.80	43.0	42.3	43.2	90.5	90.4	89.9
<i>Durable goods</i>									
Iron and steel and their products.....	51.17	51.14	52.08	45.9	46.0	46.9	111.4	111.2	110.9
Blast furnaces, steel works, and rolling mills.....	55.54	56.24	56.32	45.6	46.6	47.0	121.7	120.8	119.9
Gray-iron and semisteel castings.....	52.38	51.64	53.18	47.6	46.9	48.0	110.0	110.9	110.8
Malleable-iron castings.....	51.47	51.02	52.37	47.1	46.1	47.5	109.2	110.9	110.7
Steel castings.....	51.27	51.49	53.81	44.4	44.7	46.8	115.4	115.1	114.9
Cast-iron pipe and fittings.....	43.35	41.47	42.19	47.6	46.6	47.0	91.1	89.9	89.7
Tin cans and other tinware.....	40.91	39.05	41.24	45.1	43.0	45.1	90.7	90.9	91.3
Wirework.....	49.03	48.83	50.78	46.1	45.7	47.2	106.4	106.8	107.7
Cutlery and edge tools.....	43.73	43.18	44.69	45.2	44.5	45.9	97.1	97.4	97.7
Tools (except edge tools, machine tools, files, and saws).....	46.04	45.66	47.36	46.5	45.7	47.4	100.0	99.8	100.4
Hardware.....	46.48	46.97	47.57	46.5	46.6	47.2	100.5	100.8	100.8
Plumbers' supplies.....	47.49	49.15	50.07	44.5	45.5	46.6	106.5	107.9	107.5
Stoves, oil burners, and heating equipment, not elsewhere classified.....	47.85	46.83	49.09	45.6	44.3	46.5	105.1	105.9	105.5
Steam and hot-water heating apparatus and steam fittings.....	49.37	48.80	49.87	46.2	46.0	47.4	106.3	105.6	105.1
Stamped and enameled ware and galvanizing.....	46.37	46.87	47.93	44.8	44.6	45.7	103.4	105.0	104.8
Fabricated structural and ornamental metalwork.....	52.73	53.29	53.64	47.4	47.2	47.4	111.2	112.7	113.2
Metal doors, sash, frames, molding, and trim.....	52.46	50.25	52.58	45.4	45.3	47.3	115.4	111.0	111.1
Bolts, nuts, washers, and rivets.....	50.48	50.99	51.13	47.8	47.9	48.1	107.3	106.6	106.8
Forgings, iron and steel.....	59.14	58.40	61.71	46.5	45.9	48.1	129.7	127.3	128.4
Screw-machine products and wood screws.....	51.03	50.09	51.73	47.7	47.0	48.4	107.0	106.5	106.8
Steel barrels, kegs, and drums.....	48.00	41.55	46.10	46.9	41.8	45.5	103.0	99.7	101.4
Firearms.....	57.92	59.10	57.41	46.5	45.6	44.7	125.2	129.5	128.3
Electrical machinery.....	48.52	48.68	49.59	45.7	45.6	46.4	106.1	106.7	106.8
Electrical equipment.....	51.00	51.27	51.91	46.0	46.0	46.7	110.3	111.1	111.1
Radios and phonographs.....	42.08	42.22	43.07	45.2	45.0	46.0	92.7	93.0	93.7
Communication equipment.....	46.83	46.56	47.47	45.0	44.8	45.7	103.8	104.0	103.6
Machinery, except electrical.....	54.97	53.67	55.46	47.7	46.6	48.1	115.1	115.2	115.2
Machinery and machine-shop products.....	53.78	52.82	54.80	47.8	46.6	48.3	112.6	113.1	113.3
Engines and turbines.....	57.34	56.48	58.28	46.5	45.9	47.4	123.6	123.3	123.3
Tractors.....	53.46	52.72	52.73	45.8	45.1	45.7	116.8	116.8	115.4
Agricultural machinery, excluding tractors.....	54.18	51.30	54.19	47.2	44.9	47.1	114.7	114.3	115.0
Machine tools.....	58.09	56.50	59.53	48.8	47.7	50.2	119.1	118.3	118.7
Machine-tool accessories ²	59.25	58.86	60.40	47.8	47.8	49.1	124.2	123.5	123.1
Textile machinery.....	50.13	48.55	50.33	48.7	47.7	49.0	103.0	102.1	102.6
Typewriters.....	50.21	50.00	49.40	48.4	47.8	48.6	103.8	104.6	101.7
Cash registers, adding and calculating machines.....	58.72	57.40	58.70	47.8	46.8	48.0	123.6	123.4	122.9
Washing machines, wringers and driers, domestic.....	48.39	45.37	50.24	46.5	43.2	46.6	104.0	105.1	107.8
Sewing machines, domestic and industrial.....	55.87	54.38	57.44	49.8	48.4	51.0	112.8	112.8	113.2
Refrigerators and refrigeration equipment.....	52.83	51.53	52.66	46.0	45.2	46.1	114.3	114.0	114.2
Transportation equipment, except automobiles.....	60.18	59.55	60.58	46.3	45.9	46.8	130.1	129.7	129.5
Locomotives.....	64.65	64.97	65.42	47.3	47.3	47.7	136.2	136.9	137.2
Cars, electric and steam-railroad.....	53.91	52.80	54.30	45.6	44.1	45.6	118.2	119.7	119.1
Aircraft and parts, excluding aircraft engines.....	56.24	55.33	55.66	46.9	46.5	46.8	119.9	119.0	118.9
Aircraft engines.....	57.16	58.92	59.62	44.2	45.1	45.8	129.3	130.8	130.0
Shipbuilding and boatbuilding.....	64.28	63.25	64.68	46.3	45.8	47.0	138.6	138.2	137.8
Motorcycles, bicycles, and parts.....	52.46	54.25	53.97	47.4	47.8	48.8	110.6	113.5	110.9

See footnotes at end of table.

TABLE 6.—Hours and Earnings in Manufacturing and Nonmanufacturing Industries—Continued

MANUFACTURING—Continued

Industry	Average weekly earnings ¹			Average weekly hours ¹			Average hourly earnings ¹		
	June 1945	May 1945	April 1945	June 1945	May 1945	April 1945	June 1945	May 1945	April 1945
<i>Durable goods—Continued</i>									
Automobiles.....	\$55.64	\$55.60	\$58.28	44.0	43.9	45.5	Cents 126.6	Cents 126.6	Cents 128.0
Nonferrous metals and their products.....	49.54	49.52	50.96	46.1	46.0	47.1	107.4	107.7	108.2
Smelting and refining, primary, of non-ferrous metals.....	49.75	49.93	50.56	46.2	46.6	47.1	107.8	107.0	107.3
Alloying and rolling and drawing of non-ferrous metals, except aluminum.....	53.70	53.41	56.39	47.3	46.9	48.9	113.8	114.6	115.4
Clocks and watches.....	43.82	44.30	45.28	45.6	45.8	46.4	96.2	96.7	97.6
Jewelry (precious metals) and jewelers' findings.....	44.97	44.35	45.67	45.3	44.7	45.6	99.0	99.1	99.6
Silverware and plated ware.....	47.41	47.90	48.98	45.9	46.1	47.0	103.2	104.0	104.1
Lighting equipment.....	48.60	47.86	47.86	45.2	44.8	45.0	107.5	106.9	106.3
Aluminum manufactures.....	48.46	48.69	50.99	45.4	45.4	47.1	106.4	107.3	108.3
Lumber and timber basic products.....	36.14	34.97	35.20	44.0	42.9	43.6	82.2	81.4	80.7
Sawmills and logging camps.....	35.17	33.90	34.05	43.5	42.4	43.1	80.8	80.0	79.0
Planing and plywood mills.....	39.09	38.54	38.82	45.5	44.7	45.2	86.2	85.9	85.8
Furniture and finished lumber products.....	37.66	37.52	37.92	44.0	43.7	44.3	85.6	85.9	85.5
Furniture.....	37.99	38.23	38.81	43.6	43.5	44.2	87.8	88.3	88.1
Caskets and other morticians' goods.....	39.95	41.14	41.94	45.3	45.7	46.3	88.1	90.4	90.8
Wood preserving.....	35.60	35.18	35.30	45.2	44.6	44.8	78.7	78.8	78.8
Stone, clay, and glass products.....	40.51	40.48	41.36	43.7	43.6	44.5	92.7	92.9	92.9
Glass and glassware.....	40.04	40.65	41.74	41.1	41.7	42.8	97.5	97.7	97.8
Glass products made from purchased glass.....	36.08	36.37	36.31	43.3	44.1	44.3	83.4	82.5	82.0
Cement.....	45.41	44.38	45.19	47.8	47.2	47.6	94.9	94.0	95.0
Brick, tile, and terra cotta.....	35.60	35.17	35.90	43.4	42.3	43.3	81.5	82.5	81.9
Pottery and related products.....	37.09	37.34	37.81	41.5	41.5	42.0	90.8	91.3	90.7
Gypsum.....	45.72	43.55	45.35	48.4	46.0	48.4	94.2	94.6	93.7
Lime.....	40.28	38.46	40.21	48.6	47.9	49.6	80.8	79.5	80.8
Marble, granite, slate, and other products.....	41.82	40.45	43.07	44.6	44.3	45.6	93.8	91.7	94.6
Abrasives.....	48.10	49.43	48.96	47.1	48.1	48.1	102.2	102.8	101.8
Asbestos products.....	48.67	47.08	48.64	47.9	46.5	48.0	101.7	100.6	101.3
<i>Nondurable goods</i>									
Textile-mill products and other fiber manufactures.....	31.71	30.39	30.81	41.8	40.8	41.9	75.9	74.6	73.5
Cotton manufactures, except smallwares.....	29.01	27.76	27.70	42.0	41.3	42.3	69.2	67.3	65.5
Cotton smallwares.....	36.95	34.52	35.43	44.2	42.4	43.6	83.6	81.5	81.5
Silk and rayon goods.....	31.32	29.84	29.83	42.0	40.7	41.6	74.4	73.2	71.6
Woolen and worsted manufactures, except dyeing and finishing.....	36.93	35.38	36.52	42.3	40.7	42.2	87.3	86.9	86.5
Hosiery.....	30.13	28.87	29.82	38.1	36.9	38.0	79.1	78.1	78.4
Knitted cloth.....	34.03	32.94	33.10	43.8	42.3	43.3	77.9	77.9	76.4
Knitted outerwear and knitted gloves.....	32.25	31.29	31.84	39.5	38.8	39.6	81.3	80.1	79.3
Knitted underwear.....	27.97	27.39	28.10	40.6	39.5	40.8	69.1	69.0	68.6
Dyeing and finishing textiles, including woolen and worsted.....	35.80	34.33	35.59	45.0	43.7	45.4	79.5	78.6	78.4
Carpets and rugs, wool.....	41.70	38.76	41.48	43.6	40.5	43.7	96.0	95.7	95.2
Hats, fur-felt.....	44.82	45.98	43.18	40.3	41.0	39.7	110.1	110.8	108.7
Jute goods, except felts.....	35.21	35.26	35.22	44.5	44.5	44.9	79.1	79.2	78.4
Cordage and twine.....	34.75	33.87	34.13	45.1	44.7	45.2	76.8	75.7	75.3
Apparel and other finished textile products.....	31.26	30.81	32.65	37.2	36.4	37.9	84.0	84.7	86.2
Men's clothing, not elsewhere classified.....	34.32	32.89	34.72	38.4	37.2	39.0	89.2	88.2	88.6
Shirts, collars, and nightwear.....	25.70	25.45	26.29	37.1	36.5	37.9	69.4	69.8	69.5
Underwear and neckwear, men's.....	28.08	27.34	28.13	38.2	36.2	37.8	73.7	75.5	74.3
Work shirts.....	20.93	20.52	21.10	36.3	35.6	36.8	57.5	57.7	57.2
Women's clothing, not elsewhere classified.....	38.00	38.81	41.37	35.6	35.3	36.4	104.1	107.3	110.2
Corsets and allied garments.....	31.48	30.51	30.59	40.7	39.5	39.8	77.5	77.3	77.0
Millinery.....	33.85	29.74	38.00	29.3	26.9	31.4	95.5	93.2	99.0
Handkerchiefs.....	25.05	25.11	24.37	37.6	37.4	37.0	66.6	66.9	65.7
Curtains, draperies, and bedspreads.....	28.69	28.10	27.58	37.0	37.1	37.2	76.7	75.0	73.5
Housefurnishings, other than curtains, etc.....	32.41	32.03	33.68	40.7	39.3	41.9	78.1	80.5	80.4
Textile bags.....	29.88	29.96	30.54	41.3	41.1	42.4	72.9	72.9	72.0

See footnotes at end of table.

TABLE 6.—Hours and Earnings in Manufacturing and Nonmanufacturing Industries—Continued

MANUFACTURING—Continued

Industry	Average weekly earnings ¹			Average weekly hours ¹			Average hourly earnings ¹		
	June 1945	May 1945	April 1945	June 1945	May 1945	April 1945	June 1945	May 1945	April 1945
<i>Nondurable goods—Continued</i>									
Leather and leather products.....	\$36.13	\$34.69	\$35.73	42.1	40.4	42.0	<i>Cents</i> 85.7	<i>Cents</i> 85.9	<i>Cents</i> 85.2
Leather.....	45.00	45.02	45.21	46.1	46.1	46.4	97.4	97.9	97.5
Boot and shoe cut stock and findings.....	35.97	34.84	35.94	42.9	41.7	43.6	84.8	84.1	83.7
Boots and shoes.....	34.74	32.72	34.06	41.5	39.2	41.1	83.2	83.0	82.4
Leather gloves and mittens.....	31.08	30.50	30.74	37.9	36.6	37.6	82.0	83.6	82.0
Trunks and suitcases.....	35.47	35.80	35.62	41.0	40.8	41.5	84.2	86.0	84.8
Food.....	39.97	39.04	39.15	45.5	44.5	45.0	87.8	87.7	86.9
Slaughtering and meat packing.....	45.68	42.74	42.55	48.0	45.7	45.9	95.3	93.7	92.9
Butter.....	36.26	35.04	35.82	48.6	46.7	47.3	73.7	74.1	73.8
Condensed and evaporated milk.....	41.17	39.93	39.33	53.7	51.5	51.2	76.6	77.5	76.8
Ice cream.....	39.86	39.15	40.54	46.5	45.2	47.2	82.0	82.5	82.7
Flour.....	44.75	43.78	44.22	50.7	49.5	50.1	88.5	88.5	88.4
Cereal preparations.....	47.08	46.01	47.00	47.5	46.7	48.1	99.0	98.5	97.7
Baking.....	39.71	39.22	38.87	45.8	45.2	45.5	86.3	86.3	85.3
Sugar refining, cane.....	37.77	38.78	40.33	43.6	45.6	46.5	85.9	85.0	86.6
Sugar, beet.....	39.25	37.86	40.37	39.3	39.1	39.9	99.9	96.8	101.2
Confectionery.....	32.07	31.37	31.29	41.9	40.8	41.0	76.5	76.9	76.5
Beverages, nonalcoholic.....	35.92	35.48	35.08	44.3	43.5	43.6	81.4	81.5	80.4
Malt liquors.....	54.39	52.03	52.92	46.6	45.1	45.9	115.5	114.9	115.0
Canning and preserving.....	31.69	31.72	32.10	39.6	39.4	40.9	79.8	81.1	79.1
Tobacco manufactures.....	32.36	31.04	31.28	42.8	41.6	42.3	75.7	74.7	74.0
Cigarettes.....	35.18	33.05	33.93	43.6	41.8	43.2	80.7	79.1	78.6
Cigars ²	30.31	29.78	29.21	42.3	41.7	41.5	71.6	71.4	70.2
Tobacco (chewing and smoking) and snuff.....	28.90	27.91	28.85	41.1	40.3	41.7	70.3	69.2	69.2
Paper and allied products.....	40.80	39.77	40.63	46.4	45.4	46.5	87.9	87.6	87.4
Paper and pulp.....	44.30	43.14	43.95	48.8	47.8	48.8	90.6	90.2	90.1
Envelopes.....	38.04	37.88	38.04	44.8	44.5	44.9	84.9	85.2	84.8
Paper bags.....	35.07	34.60	35.84	42.9	42.2	43.8	82.0	82.3	82.3
Paper boxes.....	36.35	35.48	36.30	43.4	42.6	43.7	83.7	83.3	83.1
Printing, publishing, and allied industries.....	46.94	46.63	46.52	41.6	41.2	41.2	112.7	113.3	112.9
Newspapers and periodicals.....	50.74	51.09	50.60	38.8	39.0	38.7	128.9	129.1	128.8
Printing, book and job.....	45.01	44.65	44.97	42.9	42.1	42.6	105.4	106.4	106.2
Lithographing.....	50.13	49.36	48.40	45.2	44.6	44.3	110.8	110.6	109.4
Chemicals and allied products.....	45.20	45.29	44.77	45.4	45.7	45.7	99.7	99.1	98.0
Paints, varnishes, and colors.....	48.63	47.30	47.91	48.1	47.3	47.8	100.7	100.3	99.8
Drugs, medicines, and insecticides.....	36.68	36.69	35.89	43.1	43.3	42.7	85.3	85.0	84.3
Soap.....	48.07	48.15	48.44	47.9	47.8	48.1	100.4	100.7	100.6
Rayon and allied products.....	40.71	40.66	40.19	43.2	43.2	43.3	94.2	94.0	92.8
Chemicals, not elsewhere classified.....	54.23	54.03	53.83	47.2	47.3	47.3	114.9	114.1	113.9
Explosives and safety fuses.....	46.92	47.91	47.18	44.5	45.6	44.9	105.5	105.0	105.0
Ammunition, small-arms.....	45.55	46.57	45.12	45.8	46.5	45.8	99.4	100.1	98.6
Cottonseed oil.....	28.35	28.57	28.88	48.5	50.2	51.5	58.1	56.9	56.1
Fertilizers.....	32.42	32.02	33.07	45.3	45.9	48.2	71.6	69.7	68.6
Products of petroleum and coal.....	57.72	57.24	58.06	47.8	47.5	48.3	120.7	120.4	120.2
Petroleum refining.....	59.89	59.80	61.26	47.6	47.5	48.4	126.6	126.5	126.8
Coke and byproducts.....	51.57	50.64	48.72	47.9	47.8	47.3	107.9	106.0	103.8
Roofing materials.....	48.28	46.82	48.50	49.7	48.2	49.9	97.2	97.1	97.3
Rubber products.....	51.43	50.09	51.93	45.1	44.2	45.7	114.0	113.2	113.6
Rubber tires and inner tubes.....	59.20	57.32	59.75	45.3	44.6	46.3	130.7	128.4	129.4
Rubber boots and shoes.....	42.60	41.32	43.07	45.5	43.6	45.6	93.7	94.8	94.5
Rubber goods, other.....	43.41	42.68	43.63	44.9	43.9	45.1	96.7	97.3	96.8
Miscellaneous industries.....	44.80	44.40	45.49	45.1	44.8	45.8	99.4	99.2	99.3
Instruments (professional and scientific) and fire-control equipment.....	56.07	54.11	57.67	47.5	47.1	49.8	118.3	114.8	115.9
Pianos, organs, and parts ³	47.81	46.37	46.77	46.5	45.2	45.7	103.3	103.0	102.6

See footnotes at end of table.

TABLE 6.—Hours and Earnings in Manufacturing and Nonmanufacturing Industries—Continued

NONMANUFACTURING

Industry	Average weekly earnings ¹			Average weekly hours ¹			Average hourly earnings ¹		
	June 1945	May 1945	April 1945	June 1945	May 1945	April 1945	June 1945	May 1945	April 1945
Mining:							<i>Cents</i>	<i>Cents</i>	<i>Cents</i>
Anthracite.....	\$47.48	\$38.10	\$44.92	41.1	36.4	38.9	117.0	103.9	115.3
Bituminous coal.....	59.04	53.75	43.45	46.0	42.4	36.8	128.1	125.6	118.4
Metal.....	47.43	46.69	47.35	45.4	45.0	45.5	104.5	103.8	104.0
Quarrying and nonmetallic.....	42.26	41.52	41.98	48.2	47.2	48.0	88.1	87.9	87.4
Crude-petroleum production.....	54.84	54.08	53.89	46.3	46.1	45.2	118.4	117.2	119.1
Public utilities:									
Telephone.....	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Telegraph ⁴	38.49	38.35	37.33	46.2	45.7	44.8	83.3	83.9	83.3
Electric light and power.....	50.59	50.26	50.18	44.4	44.5	43.6	113.6	113.2	114.5
Street railways and busses.....	50.07	49.30	48.65	52.2	51.7	51.0	95.8	95.4	95.6
Trade:									
Wholesale.....	44.13	43.83	44.51	42.8	42.9	43.2	102.7	101.8	103.1
Retail.....	28.46	27.56	27.69	40.6	39.4	39.9	77.0	76.4	76.3
Food.....	33.59	32.19	32.19	41.8	40.1	40.2	76.1	75.5	75.2
General merchandise.....	23.60	22.63	22.83	36.4	35.0	35.4	64.4	63.3	63.4
Apparel.....	29.73	28.90	29.05	37.2	36.3	36.4	82.0	80.8	81.0
Furniture and housefurnishings.....	39.52	39.46	39.54	44.3	43.6	44.1	89.7	90.5	90.9
Automotive.....	43.43	42.55	43.63	46.4	45.6	46.6	94.5	94.4	94.5
Lumber and building materials.....	38.64	38.40	39.04	43.4	43.1	43.8	90.5	90.2	89.8
Hotels (year-round) ⁵.....	24.43	24.03	23.99	44.3	44.4	44.3	54.1	53.5	53.3
Power laundries.....	28.76	28.64	28.98	43.4	43.4	43.8	66.2	66.2	66.0
Cleaning and dyeing.....	33.50	32.92	33.41	43.8	43.0	43.9	77.3	76.5	76.9
Brokerage.....	66.15	66.40	62.25	(3)	(3)	(3)	(3)	(3)	(3)
Insurance.....	47.66	46.71	47.11	(3)	(3)	(3)	(3)	(3)	(3)
Private building construction.....	55.50	53.64	54.42	40.4	39.3	40.0	137.4	136.6	136.1

¹ These figures are based on reports from cooperating establishments covering both full- and part-time employees who worked during any part of one pay period ending nearest the 15th of the month. As not all reporting firms furnish man-hour data, average hours and average hourly earnings for individual industries are based on a slightly smaller sample than are weekly earnings. Data for the current and immediately preceding months are subject to revision.

² Revisions have been made as follows in data for earlier months:

Machine-tool accessories.—March 1945 to \$61.08.

Underwear and neckwear, men's.—February 1945 to \$28.02 and 74.6 cents.

Cigars.—January, February, and March 1945 to \$29.67, \$29.87, and \$29.87.

Pianos, organs, and parts.—March 1945 to \$47.09 and 46.2 hours.

³ Not available.

⁴ Excludes messengers and approximately 6,000 employees of general and divisional headquarters and cable companies.

⁵ Cash payments only; additional value of board, room, and tips, not included.

Civilian Labor Force, July 1945

THE civilian labor force increased by 610,000 persons between June and July 1945 to a total of 53,750,000, according to the Bureau of the Census sample Monthly Report on the Labor Force. During the month, employment increased by 600,000, while the volume of unemployment increased by 10,000 to a level of 1,090,000.

The gain in employment between June and July resulted largely from the entrance of teen-age youngsters into the labor force at the close of the school term. Most of these students on vacation found employment in nonagricultural pursuits, particularly in the trade and service industries. An employment decline in the munitions manufacturing industries, reflecting the effect of cut-backs in certain war production programs, was more than offset by increases in other, nonwar industries.

The level of employment in July 1945 was 1,340,000 below that in July 1944—530,000 in farm employment and 810,000 in nonfarm employment. An unusually small seasonal increase in agricultural employment between April and July largely accounted for the relatively low agricultural employment total this year. The induction of men into the armed forces was the main factor underlying the decline in nonagricultural employment during the year. Since April of this year, however, nonagricultural employment has also been reduced by withdrawals of women from the labor force following lay offs in munitions industries.

The release of war workers had not greatly raised the unemployment total by July of 1945. The early summer increase in the volume of unemployment was, for the most part, seasonal in character. As is usually the case, many students leaving school and college did not find jobs immediately.

Civilian Labor Force in the United States, Classified by Employment Status and by Sex, June and July 1940-45¹

[Source: U. S. Department of Commerce, Bureau of the Census]

Item	Estimated number (in thousands) of persons 14 years of age and over ²											
	1945		1944		1943		1942		1941		1940	
	July	June ³	July	June	July	June	July	June	July	June	July	June
Total civilian labor force.....	53,750	53,140	55,000	54,220	56,040	55,220	56,770	56,260	56,550	56,130	56,420	55,590
Unemployment ⁴	1,090	1,080	1,000	1,000	1,290	1,220	2,430	2,550	5,240	5,520	8,410	7,720
Employment.....	52,660	52,060	54,000	53,220	54,750	54,000	54,340	53,710	51,310	50,610	48,010	47,840
Nonagricultural.....	43,520	42,970	44,330	43,660	45,050	44,180	44,340	43,480	41,380	40,510	37,350	36,950
Agricultural.....	9,140	9,090	9,670	9,560	9,700	9,820	10,000	10,230	9,930	10,100	10,660	10,890
<i>Males</i>												
Civilian labor force.....	34,940	34,380	35,890	35,540	37,380	36,880	41,220	40,790	42,150	41,790	42,570	41,710
Unemployment ⁴	500	580	480	500	710	660	1,510	1,610	3,580	3,800	5,890	5,450
Employment.....	34,380	33,800	35,410	35,040	36,670	36,220	39,710	39,180	38,570	37,990	36,680	36,260
Nonagricultural.....	27,350	26,840	27,890	27,600	29,050	28,610	31,510	31,070	30,100	29,480	27,270	27,090
Agricultural.....	7,030	6,960	7,520	7,440	7,620	7,610	8,200	8,110	8,470	8,510	9,410	9,170
<i>Females</i>												
Civilian labor force.....	18,810	18,760	19,110	18,680	18,660	18,340	15,550	15,470	14,400	14,340	13,550	13,850
Unemployment ⁴	530	500	520	500	580	560	920	940	1,660	1,720	2,520	2,270
Employment.....	18,280	18,260	18,590	18,180	18,080	17,780	14,630	14,530	12,740	12,620	11,330	11,580
Nonagricultural.....	16,170	16,130	16,440	16,060	16,000	15,570	12,830	12,410	11,280	11,030	10,080	9,860
Agricultural.....	2,110	2,130	2,150	2,120	2,080	2,210	1,800	2,120	1,460	1,590	1,250	1,720

¹ Estimates for period prior to November 1943 revised Apr. 24, 1944.

² All data exclude persons in institutions.

³ Nonagricultural employment, total employment, and civilian labor force figures revise slightly the originally published estimates for June 1945.

⁴ Includes persons on public emergency projects prior to July 1943.

Recent Publications of Labor Interest

September 1945

Cooperative Movement

Consumer cooperatives. Washington, American Federation of Labor, [1945?]. 19 pp.

Includes that part of the report of the executive council to the federation's convention in 1944 relating to cooperatives, statements on action concerning cooperatives taken by the convention, and statistics (membership, business, patronage refunds) of cooperatives in which union members have places on the boards of directors.

Cooperatives in the Americas. By Max Levin and Dora Thea Hettwer. Washington, Office of the Coordinator of Inter-American Affairs, 1945. 26 pp.; mimeographed.

Defines the various types of cooperatives, summarizes the development of the types existing in the United States and in Latin American countries, and describes briefly the international aspects of the cooperative movement.

La cooperación en Colombia. [Medellín], Centro de Estudios Cooperativos de Antioquia, 1945. 90 pp.

Proceedings of the First National Congress of Cooperatives of Colombia, held in Medellín, September 15-23, 1943.

The consumers' movement in Belgium. (In Review of International Cooperation, London, March-April 1945, pp. 40-44.)

Gives data on operations of consumers' cooperatives of various kinds from 1938 to 1943 and describes their position during the German occupation and since the liberation of Belgium.

Cooperative transport in Palestine. By P. Gorochovsky. (In International Transport Workers' Journal, Bedford, England, January-February 1945, pp. 5, 6.)

Describes activities of 11 cooperative associations engaged in transportation of passengers in Palestine.

Cost and Standards of Living

Advances in the techniques of measuring and estimating consumer expenditures. By Dorothy S. Brady and Faith M. Williams. (In Journal of Farm Economics, Menasha, Wis., May 1945, pp. 315-344. \$1.25.)

Several important studies of consumption and family expenditures in the early 1930's are described as points of departure for recent studies designed to measure and estimate consumer expenditures. Problems of measuring both income and expenditures are discussed and current methods are described. It is indicated that the vital importance of consumer expenditures and of their relation to well-being call for the further improvement of techniques in the postwar fight against want.

Restricted quantity and cost budget for maintenance of families or children (current needs only). Wartime budget for a single working woman. Wartime budgets for three income levels. Wartime food for four income levels. Berkeley, Calif., University of California, Heller Committee for Research in Social Economics, 1945. 64, 21, 117, 53 pp., respectively; mimeographed. 50, 20, 85, 35 cents. Prices used in the budgets were those prevailing in San Francisco in March 1945.

EDITOR'S NOTE.—Correspondence regarding the publications to which reference is made in this list should be addressed to the respective publishing agencies mentioned. Where data on prices were readily available, they have been shown with the title entries.

Our food: Lucknow City. By S. K. Rudra. Allahabad, Government Central Press, 1944. 45 pp., charts.

A lecture arranged by the Lucknow Social Service League formed the basis of this study of the sources, prices, types, and amounts of available foods, in various years down to and including 1944.

Employment and Readjustment of Veterans

Bibliography on postwar readjustment for service men and women. [Presidio of San Francisco, Calif.?], U. S. Army Service Forces, Ninth Service Command, Special Services Division, Office of Librarian, August 1945. 60 pp.; mimeographed. Rev. ed.

Seniority in veteran reemployment. New York, American Management Association, 1945. 46 pp. (Personnel series No. 92.)

Symposium by representatives of management, unions, the medical profession, and the Selective Service System with regard to reemployment rights of veterans.

Straight talk for disabled veterans. By Edna Yost. New York, Public Affairs Committee, Inc., 1945. 31 pp. (Public affairs pamphlet No. 106.) 10 cents.

Advice to the disabled serviceman on how to bring about his recovery and effect successful return to civilian life. The writer states that the "biggest job" a disabled man has is to save himself from being a "mental cripple," and that his disability need be no bar to job success or social life.

Veterans' benefits: Information concerning monetary and other benefits available to persons who have served in the armed forces of the United States and to the dependents of such persons, December 15, 1944. Washington, U. S. Veterans' Administration, 1945. 106 pp. (Pamphlet No. 44.) 15 cents, Superintendent of Documents, Washington.

Demobilization and employment. London, PEP (Political and Economic Planning), 1944. 32 pp. (Pamphlet No. 2.) 1s.

Discussion of different methods of release of members of Britain's armed forces, showing demobilization methods used after the last war and summarizing conditions believed likely to arise after the present war.

Employment and Unemployment

Estimated employment and wages of workers covered by State unemployment compensation laws, January-June 1944. Washington, Federal Security Agency, Social Security Board, Bureau of Employment Security, 1945. 20 pp., chart; processed. (Supplement to Employment Security Activities, April 1945.)

Employment for all. London, PEP (Political and Economic Planning), 1944. 32 pp., charts. (Pamphlet No. 3.) 1s.

Presents guiding principles of a long-term policy for full employment.

Postwar jobs—a new approach. By George Richmond Walker. (In *International Postwar Problems*, New York, July 1945, pp. 340-352. \$1.)

The author discusses postwar jobs not primarily from the point of view of economics, but rather as a problem of mechanics, morals, and politics. The "mechanical" problem is to "see to it that all the money paid out in costs and profits at the rear door of industry is promptly taken around to the front door and used to buy the goods and services produced." The problem of "morals" is to associate with the freedom to accumulate savings the denial of the privilege of withholding savings from use, which is viewed as the major source of unemployment and restricted production. The "political" problem is viewed as largely that of maintaining conditions favorable for the solution of the "mechanical" and "moral" problems.

A social work program for full employment. New York, Social Work Action Committee, 1945. 4 pp. (SWAC No. 1.)

Unemployment can be cured. By K. E. Edgeworth. Dublin, Eason & Son, Ltd., 1944. 157 pp. 10s. 6d. net.

Causes of unemployment are divided into four major types—fluctuations in demand for industrial equipment and for buildings, decline in existing industries owing to the creation of others, reductions in purchasing power caused by over-saving, and the competition of more efficient industries in other countries. The author suggests solutions in each instance.

Family Allowances

Child endowment in Australia. By Francis H. Rowe. (In Bulletin of the Child Welfare League of America, Inc., New York, February 1945, pp. 1-3. 10 cents.)

Baby bonuses: Dollars or sense? By Charlotte Whitton. Toronto, Ryerson Press, 1945. 48 pp. 25 cents.

Criticism of the Canadian Family Allowances Act of 1944, which became effective July 1, 1945.

Family allowances—a children's charter. Ottawa, Department of National Health and Welfare, [1945?]. 17 pp.

Defines family allowances, tells why they are needed in Canada, and answers a series of questions on the Canadian family-allowance plan and how it will work.

Family allowances and social security—Lady Rhys-Williams' scheme. London, Liberal Publication Department, 1944. 24 pp. 4d.

Proposals for unifying income-tax allowances with social-security benefits, including family allowances, for the purpose of effecting a more equitable income distribution between persons without dependents and those with family responsibilities, and also for providing a minimum income for the entire community without doubling contributions for insurance and with as little strain as possible upon taxation machinery.

Immediate prospects for family allowances. By Eleanor F. Rathbone. (In Highway, Workers Educational Association, London, February 1945, pp. 62-64. 2d.)

Reviews the beginnings of the family-allowance movement in Great Britain, takes up the question of allocations in cash or in kind, and appeals for higher grants than those provided in the present British bill for such allowances.

Las asignaciones familiares en la protección a la infancia. By Roberto Berro. Montevideo, Ediciones Ceibo, 1944. 16 pp.

Considers family allowances in relation to the family income and the living wage and gives data on these grants in Uruguay and certain other countries.

Industrial Accidents and Accident Prevention

Shipyard injuries, 1944. Washington, U. S. Bureau of Labor Statistics, 1945. 10 pp. (Bull. No. 834; reprinted from Monthly Labor Review, May 1945, with additional data.) 5 cents, Superintendent of Documents, Washington.

Accident prevention through accident prediction. By Alfred J. Cardall. (In Personnel, New York, May 1945, pp. 333-338. \$1.)

Emphasizes importance of psychological factors, especially fluctuations in emotional stability, in relation to accident proneness, and the need for definitions, by specialists, of job requirements in terms of significant psychological and physiological factors.

Spotting accident-prone workers by vision tests. By N. Frank Stump. (In Factory Management and Maintenance, New York, June 1945, pp. 109-112; diagrams, illus. 35 cents.)

Gives results of studies made by Revere Copper & Brass, Inc., of relationships between visual functions and safety, and discusses above-normal vision as an important factor in safety.

Thirty years of accidents and workmen's compensation [in New York State]. (In Industrial Bulletin and Employment Review, Department of Labor, Albany, January-February 1945, pp. 47-53. 10 cents.)

Los accidentes del trabajo en la agricultura, [Argentina]. By Benito Pérez. Buenos Aires, Sociedad Bibliográfica Argentina, 1943. xxiii, 317 pp., bibliography. Treatise on compensation for accidents to agricultural workers.

Industrial Hygiene

Dermatitis cases reported among workers in seven States. By H. P. Brinton and Louis Schwartz. (In Industrial Medicine, Chicago, July 1945, pp. 617-627. 50 cents.)

Analysis of 32,512 cases reported to the U. S. Public Health Service for the period July 1938-October 1943, with statistics as to industry and material exposure.

Increasing importance of industrial health in industrial relations. By V. P. Ahearn. (In Transactions, management section, ninth annual meeting of Industrial Hygiene Foundation, pp. 11-15. Pittsburgh, Industrial Hygiene Foundation, 1945. Transactions series, bull. No. 4.)

Presents recent issues regarding physical examinations, sick-leave plans, group insurance, etc., in major cases coming before the U. S. National War Labor Board.

Methods of testing and protecting eyesight in industry. New York, Metropolitan Life Insurance Co., [1945]. 70 pp., diagrams, illus. (Industrial health series No. 4.)

Describes new uses of industrial eye examinations, new methods of testing, procedure for installing an industrial eye program, various kinds of equipment, lighting standards, and other factors.

Cloakrooms, washing facilities, drinking water, and sanitary accommodation in factories. London, Ministry of Labor and National Service, 1945. 14 pp., diagrams, illus. (Welfare pamphlet No. 8.) 1s. net.

Prepared to supply information to employers and others on the best arrangements for the health, comfort, and convenience of industrial workers, with respect to facilities listed in the title.

Good seating returns a dividend. By T. A. Churton. Wellington, New Zealand, Department of Scientific and Industrial Research, Industrial Psychology Division, 1944. 32 pp., illus. (Pamphlet No. 1.) 3s. 6d.

Outlines advantages of correct seating for the job, and makes recommendations as to proper facilities. Illustrations show good and bad types of seats.

Industrial Relations

Arbitration of labor disputes. By Abraham A. Desser. (In Conference Board Management Record, National Industrial Conference Board, Inc., New York, April 1945, pp. 95-99.)

Based on reports from 291 companies, 216 of which have arbitration clauses in their union contracts. There are discussions of the nature of arbitration procedures, and of the views of labor organizations and employers.

Collective bargaining by supervisory and technical personnel. Princeton, N. J., Princeton University, Industrial Relations Section, March 1945. 4 pp. (Selected references, No. 2.) 10 cents.

Employer-employee relations. By Wayne L. McNaughton. Los Angeles, Golden Gate Publishers, 1944. 309 pp. \$4.75.

Written primarily as a college text, the book contains discussions of factors affecting the relative bargaining strength of employers and employees, mutual settlement of disputes, and settlement of disputes by representatives of the public. Partial or complete texts of major Federal laws are given in appendixes, together with an illustrative collective agreement.

A guide for shop stewards and committeemen, 1945 edition. Los Angeles, Labor Relations Associates, Inc., 1945. 73 pp.

Responsibility and authority, handling of grievances, preferential seniority for stewards, relationship with foremen, the foreman's responsibility, and labor legislation are subjects covered by the guide, which is a composite, with some variation, of material published in bulletins of the Division of Labor Standards of the U. S. Department of Labor.

Practical approaches to labor relations problems. New York, American Management Association, 1945. 63 pp. (Personnel series No. 91.)

Subjects of the papers presented in this bulletin include policies of the U. S. National War Labor Board (by its chairman), guaranteed wages, white-collar workers, and negotiating a labor contract.

Strikes and lockouts in 1944. Washington, U. S. Bureau of Labor Statistics, 1945. 35 pp., map, charts. (Bull. No. 833; reprinted from Monthly Labor Review, May 1945, with additional data.) 10 cents, Superintendent of Documents, Washington.

Labor Organizations

The forward march of American labor: A brief history of the American labor movement written for union members. New York, League for Industrial Democracy, 1945. 32 pp., bibliography. 15 cents.

Voluntarism in organized labor in the United States, 1930-1940. By George Gilmary Higgins. Washington, Catholic University of America, 1944. 182 pp., bibliography. (Studies in economics, Vol. 13.)

Outlines the historic policy of the American Federation of Labor known as "voluntarism" and the modification of that policy since the depression of the 1930's. The social and economic reasons for this change and its effect on the trade-union movement in the United States are also evaluated.

Report on activities [of International Federation of Trade Unions], 1944; Meeting of the general council of the I. F. T. U.—summary of proceedings. London, International Federation of Trade Unions, 1945. 31 pp.

Includes statistics of membership of national centers affiliated to I. F. T. U. in 16 countries and information on relations with trade-union movements in a number of additional countries.

Should organized labor in Canada cooperate closely with organized labor in the United States? By Idele Wilson. Toronto, Workers' Educational Association, [1945?]. 9 pp. (Research bull. No. 9; reprinted from Quarterly Review of Commerce, University of Western Ontario, Vol. XI, No. 2.)

Discusses proportion of Canadian organized labor in international unions and the relationships between United States and Canadian unions.

Labor Requirements and Labor Recruitment

Indexes of labor requirements for selected shipbuilding programs. Washington, U. S. Bureau of Labor Statistics, 1945. 12 pp.; mimeographed. Free.

Labor requirements for manufacture of synthetic rubber. Washington, U. S. Bureau of Labor Statistics, 1945. 14 pp. (Serial No. R. 1748; reprinted from Monthly Labor Review, May 1945, with additional data.) Free.

Mexican war workers in the United States. Washington, Pan American Union Division of Labor and Social Information, 1945. 46 pp., illus.; mimeographed.

Describes main characteristics of the program under which Mexican workers have been recruited for war work in the United States, with respect to the agreements entered into between the two governments and the manner in which they were carried into effect up to December 31, 1944.

Medical Care and Sickness Insurance

Health care for Americans. By C.-E. A. Winslow. New York, Public Affairs Committee, Inc., 1945. 31 pp., bibliography, charts. (Public affairs pamphlet No. 104.) 10 cents.

Presents findings of medical surveys and advocates comprehensive medical care through compulsory health insurance with alternates for families with incomes above \$2,000 and for the very-low-income and dependent groups.

Health insurance: An inquiry into some of the factors and forces underlying the demand for a compulsory system. By Carl W. Strow and Gerhard Hirschfeld. (In Journal of the American Medical Association, Chicago, July 21, 1945, pp. 870-878; charts. 25 cents.)

Medical care for persons in need. By A. J. Altmeyer. (In Social Security Bulletin, Federal Security Agency, Social Security Board, Washington, May 1945, pp. 3-5. 20 cents, Superintendent of Documents, Washington.)

The U. S. Social Security Board has recommended that the use of Federal funds be authorized under the public-assistance programs to share costs of medical care for persons in need.

Prepayment medical-care plans for low-income farmers in Ohio. By Robert L. McNamara and A. R. Mangus. Wooster, Ohio, Agricultural Experiment Station, 1944. 29 pp., chart. (Bull. No. 653.)

Study of the operation, in five southern Ohio counties, 1940-43, of a limited type of health plan sponsored by the U. S. Farm Security Administration for its clients. One of the general conclusions is that this group would be unable to pay the cost of an adequate health-insurance program.

A program of preventive medicine for the individual. By Milton I. Roemer, M.D. (In Milbank Memorial Fund Quarterly, New York, July 1945, pp. 209-226; chart. 25 cents.)

Points out the need for including a preventive health service for the individual in any program of organized medical care (whether voluntary or compulsory), and outlines a low-cost approach (with estimates) for various services, groups, and ages, through a "health-center" type of operation (with salaried personnel) combining preventive and curative services.

Socialized medicine. (In Index, New York Trust Co., New York, Vol. XXV, No. 2, summer 1945, pp. 25-39; charts.)

Deals with services and facilities for medical care, and advocates voluntary means, a broadened public-health service, and "encouraging private insurance companies to add to the usefulness of their service," rather than compulsory health insurance.

Negro in Industry

Negro socio-economic status in a southern city [New Orleans]. By Harlan Gilmore and Logan Wilson. (In Sociology and Social Research, Los Angeles, May-June 1945, pp. 361-373. 60 cents.)

The Negroes' struggle for status in industry and the armed forces. (In Information Service, Federal Council of the Churches of Christ in America, New York, June 9, 1945, pp. 1-4. 5 cents.)

Resumé of some recent articles and pronouncements on Negro problems, a number of which are concerned with employment.

Race relations in Chicago. Chicago, Mayor's Committee on Race Relations, 1944. 25 pp.

Employment, housing, and postwar economic dislocation of Negroes are among the subjects discussed.

What the Negro wants. Edited by Rayford W. Logan. Chapel Hill, University of North Carolina Press, 1944. xxiii, 352 pp. \$3.50.

Collection of articles by 14 leading Negroes, among whom are so-called conservatives, liberals, and radicals. Labor and economic problems are taken up, in some cases at considerable length. Protest against job discrimination and the demand for equality of opportunity are among the dominant notes in the volume.

Occupations and Occupational Adjustment

Establishing and operating your own business. Washington, U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce, 1945. 30 pp. (Industrial series No. 19.) 10 cents, Superintendent of Documents, Washington.

Broad picture of the factors that should be considered by a person who contemplates establishing a business of his own. An appendix gives a check list for establishing a retail business, but the points raised "apply equally to all types of small business." A series of bulletins dealing with individual enterprises is being published by the Bureau of Foreign and Domestic Commerce, of which the first two are listed immediately following.

Establishing and operating a metal working shop. By William H. Myer and others. Washington, U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce, 1945. 202 pp., diagrams, illus. (Industrial series No. 16.) 35 cents, Superintendent of Documents, Washington.

First of a series of "small business manuals" being prepared by the U. S. Bureau of Foreign and Domestic Commerce to furnish to the "thoroughly experienced skilled worker," sound and practical information on establishing and operating various types of enterprises, including mercantile, retail, and service trades.

Establishing and operating a shoe repair business. By J. G. Schnitzer and Charlotte R. Budd. Washington, U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce, 1945. 190 pp., illus. (Industrial series No. 17.) 35 cents, Superintendent of Documents, Washington.

Second of the series of "small business manuals" described in the preceding note.

How to get the job. By Mitchell Dreese. Chicago, Science Research Associates, 1944. 49 pp. Rev. ed. (Occupational monograph No. 19.) 60 cents.

Matching men and farms. By Franklin R. Zeran. Washington, Federal Security Agency, Office of Education, 1944. 38 pp. (Vocational Division bull. No. 229; Occupational information and guidance series No. 12.) 10 cents, Superintendent of Documents, Washington.

An effort to analyze the three basic factors of the "matching" process: Farm operation as an occupation, opportunities for carrying on the vocation of farm operation, and kinds of persons most suitable for farm operators.

National physical demands information series, No. 1: Apprenticeship occupations. Washington, U. S. War Manpower Commission, Bureau of Manpower Utilization, Division of Occupational Analysis, 1944. 112 pp.; processed.

Descriptions of typical physical activities, working conditions, and hazards in 104 occupations, for use in counseling, placement, and related fields.

Personnel Management

Counseling services for industrial workers. By Mary Palevsky. New York, Family Welfare Association of America, 1945. 51 pp., bibliography. 60 cents.

Shows wartime development of counseling services sponsored, respectively, by management, trade unions, and social agencies, as well as of joint community-union projects.

Employee counseling: A new viewpoint in industrial psychology. By Nathaniel Cantor. New York, McGraw-Hill Book Co., Inc., 1945. 167 pp. \$2.

Employment tests in industry and business—a selected, annotated bibliography. By Hazel C. Benjamin. Princeton, N. J., Princeton University, Industrial Relations Section, April 1945. 44 pp. (Bibliographical series No. 67—revised.) 50 cents.

Music and sound systems in industry. By Barbara Elna Benson. New York, McGraw-Hill Book Co., Inc., 1945. 124 pp., bibliography, illus.

Discusses organization, equipment, and uses of the comparatively new field of broadcasting in industrial plants. A list of music records suggested for specified uses is appended.

Personnel practices for general staff nurses. By Department of Studies, National League of Nursing Education. New York, American Nurses' Association, 1944. 75 pp.

Second part of a study of salaries and personnel practices for general staff nurses. Covers housing, hours of duty, opportunities for professional development, physical examinations, policies concerning illness, and vacations. The first part of the study (published in 1943) dealt with salaries only.

Postwar Reconstruction

Labor in the community. By Clayton W. Fountain. (In *Antioch Review*, Vol. 5, No. 2, Yellow Springs, Ohio, summer 1945, pp. 285-297. 75 cents.)

The author calls for the uniting of labor with farmers, technicians, managers and administrators of industry and finance, small businessmen, professionals, and white collar workers in espousing a minimum common program. A "mixed economy" which subjects basic financial and productive facilities to social management under collective economic control is recommended as the democratic medium through which such cooperation can be achieved. Organized labor, he believes, can take the initiative "by expanding the scope of trade unionism to a high level of active participation in community matters of housing, health, taxation, racial relations, recreation, music, and education."

Men at work: Some democratic methods for the power age. By Stuart Chase. New York, Harcourt, Brace & Co., 1945. 146 pp. \$2.

By concrete illustrations the author depicts recent attempts to combine planning with democracy. His examples of a ghost lumber town replanned for steady employment, training methods developed within industry for the purpose of promoting efficient and democratic supervisory methods, and the "humanizing" of government agencies and functions are some of the bases for his belief that technical progress can be allied with democracy in planning our postwar national economy.

Program and activities of the Maryland Commission on Postwar Reconstruction and Development, 1943-44. Baltimore, 1945. 30 pp., map, chart. (Publication No. 3.)

Devoted largely to recommendations for dealing with the problems of postwar employment and unemployment, including an outline of a public works program. There are estimates of the labor force in Maryland during the war and postwar periods.

Economic reconstruction in France. By Jacques Granville. (In *World Economics*, Washington, March-June 1945, pp. 9-38.)

Traces the economic and political position from the decade after the war of 1914-18 through the Vichy regime and discusses relief and rehabilitation and long-range problems. It is concluded that if France is to become the preeminent industrial nation in western and central Europe, traditional economic and social thinking must change drastically.

[*Papers presented at ninth conference of Institute of Pacific Relations, Hot Springs, Virginia, January 1945.*] New York, Institute of Pacific Relations, International Secretariat, 1945. Separate pamphlets, variously paged.

The papers include the following: Aspects of wartime economic control in Japan; Basic problems of relief, rehabilitation, and reconstruction in Southeast Asia; China's economic reconstruction; Economic planning in India; India's postwar reconstruction and its international aspects; Legal and administrative problems of the Netherlands Indies; Notes on labor problems in Burma and Thailand; Notes on labor problems in Indochina; Postwar social and economic problems of French Indochina; Reconstruction in New Zealand, with special reference to international aspects; Requirements of an expanding economy for Australia.

Production and Productivity of Labor

National product in wartime. By Simon Kuznets. New York, National Bureau of Economic Research, Inc., 1945. 156 pp. (Publication No. 44.) \$2.

The author states that estimates of national product must be made in accordance with assumptions about which there is no general agreement. These differences of concepts of national product are magnified by a major war. The problems are discussed and attempts are made to apply tentative solutions in measuring changes in national product during World Wars I and II. Estimates for the period of the first World War and the years immediately following the war are based upon estimates formerly published by the National Bureau of Economic Research, with adjustments to attain closer comparability with the estimates for recent years.

Production guide for labor-management committees: Ways of handling production problems. Washington, U. S. War Production Board, War Production Drive Headquarters, 1945. 27 pp., charts.

Production handbook. Edited by L. P. Alford and John R. Bangs. New York, Ronald Press Co., 1945. 1676 pp., diagrams, illus. \$7.50.

Deals with problems of directing the men, materials, and machines of a manufacturing establishment. The 25 major sections include studies of various phases of plant organization and maintenance, production planning and control, and personnel problems.

Productivity and unit labor cost in selected manufacturing industries, 1939-44.

Productivity and unit labor cost in selected mining industries, 1935-44. *Productivity and unit labor cost in steam-railroad transportation, 1935-44.* *Productivity in agriculture, 1942-44.* Washington, U. S. Bureau of Labor Statistics, 1945. 13, 9, 4, 6 pp., respectively; mimeographed. Free.

War production in 1944: Report of the chairman of the War Production Board. Washington, 1945. 142 pp., charts. 25 cents, Superintendent of Documents, Washington.

The supervisory role of the U. S. War Production Board in directing war production, fulfilling civilian requirements, and planning reconversion during 1944 is described. An appendix to the report includes statistical data concerning output, consumer expenditures, and facilities expansion.

Social Security (General)

Social security. A statement by the social security committees of American Life Convention, Life Insurance Association of America, National Association of Life Underwriters. [Chicago, American Life Convention?], 1945. 57 pp.

Sees "no necessary conflict between voluntary provision and a soundly designed social security plan." Lays down "principles and safeguards," and makes recommendations concerning the present Federal social-security system.

Social security for the American people. Speech of Hon. Robert F. Wagner of New York in the Senate of the United States, May 24, 1945. Washington, 1945. 22 pp.

Explanation of provisions of a bill (S. 1050) introduced in the 79th Congress, first session, by Senator Wagner, to amend the Federal Social Security Act.

Social security for State and local Government employees. By A. J. Altmeyer. (In Social Security Bulletin, Federal Security Agency, Social Security Board, Washington, April 1945, pp. 4-7. 20 cents, Superintendent of Documents, Washington.)

The Chairman of the Social Security Board points out the role which the Federal social security system could play in covering the totally unprotected employees of State and local Governments and in strengthening the position of those now protected by retirement systems.

Railroad social insurance: Favored treatment versus uniform social insurance. By Rainard B. Robbins. New York and Washington, American Enterprise Association, 1945. 82 pp. (National economic problems, No. 405.) 50 cents.

Comparison of present Federal railroad-retirement and unemployment-insurance plans now in operation in the United States, with proposed amendments contained in the Crosser bill (H. R. 1362, January 11, 1945), and discussion of questions growing out of this legislation.

Public health and welfare reorganization—the postwar problem in the Canadian Provinces. By Harry M. Cassidy. Toronto, Ryerson Press, 1945. 464 pp. \$3.50.

Wages and Hours of Labor

College salaries, 1941-42. By Maude Farr. Washington, Federal Security Agency, Office of Education, 1945. 27 pp., chart; processed. (Circular No. 232.)

The data are for full-time faculty members in different types and groups of degree-granting colleges and universities for the school year 1941-42. For land-grant institutions only, comparative figures are given for 8 earlier years back to 1928-29.

Revised estimates of wages and salaries in the national income, 1929-43. By Edward F. Denison. (In Survey of Current Business, U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce, Washington, June 1945, pp. 17-24. 20 cents, Superintendent of Documents, Washington.)

Wages and wage rates of seasonal farm workers in special crop areas of Florida, February-March, 1945. Washington, U. S. Department of Agriculture, Bureau of Agricultural Economics, 1945. 18 pp.; mimeographed. (Survey of wages and wage rates in agriculture, Report No. 1.)

First in a series of surveys giving information on wages and wage rates of seasonal farm workers in special crop areas of various States. This Florida survey includes wage rates and earnings for approximately 2,000 harvesters in the major citrus, strawberry, and southern winter-vegetable producing areas. A second report issued in this series deals with Maricopa County, Ariz., and Imperial County, Calif. In addition to further studies on seasonal workers in other areas, reports

will be issued, on the basis of national surveys, giving wage and related information for all hired farm workers, both regular and seasonal.

Wartime changes in urban wage relationships. By Robert J. Myers. (In *Journal of the American Statistical Association*, Menasha, Wis., June 1945, pp. 175-186. \$1.50.)

Discussion of wage-rate statistics collected by the Bureau of Labor Statistics during the war, with particular reference to analysis of intercity differences, urban wage trends before stabilization, and wage trends in the stabilization period. It is stated that the striking differences at the beginning of the war production program in the rates of pay among major American cities continued during the war but with some important modifications. Several midwestern cities have lagged somewhat behind the trend, and southern cities, which paid the lowest wages before the war, have shown the greatest increases. The author mentions the problem arising from the fact that millions of workers expected to depart from war production centers will find substantially lower wage rates awaiting them.

Postwar wage stabilization. Compiled by Julia E. Johnsen. New York, H. W. Wilson Co., 1945. 227 pp., bibliography. (Reference shelf, Vol. 17, No. 7.) \$1.25.

Wage control in wartime and transition. By Harry Henig and S. Herbert Unterberger. (In *American Economic Review*, Menasha, Wis., June 1945, pp. 319-336. \$1.25.)

The authors describe the work of the U. S. National War Labor Board during the war, and propose a modified wage-stabilization program for the transition period designed primarily to maintain wage levels against downward pressures.

General Reports

Fact-finding activities of the Bureau of Labor Statistics. Washington, U. S. Bureau of Labor Statistics, 1945. 27 pp. (Bull. No. 831; reprinted from *Monthly Labor Review*, May 1945.) 10 cents, Superintendent of Documents, Washington.

Development of China. By Frank P. Huddle. Washington (1013 13th Street NW.), Editorial Research Reports, 1945. 17 pp. (Vol. I, 1945, No. 7.) \$1.

Discussion of the growth in industrialization in China and plans for postwar development. Natural resources and economic and social problems are taken into account.

Economic development in S. E. Europe. London, PEP (Political and Economic Planning), 1945. 165 pp. 10s.6d. net.

Analysis of the economic situation of prewar Poland, Czechoslovakia, Austria, Hungary, Rumania, Yugoslavia, Bulgaria, and Greece, with recommendations of policies (including foreign help) which would contribute to the substantial economic development of these countries. One chapter discusses national income and nutrition, and another, industrial development and the problem of manpower.

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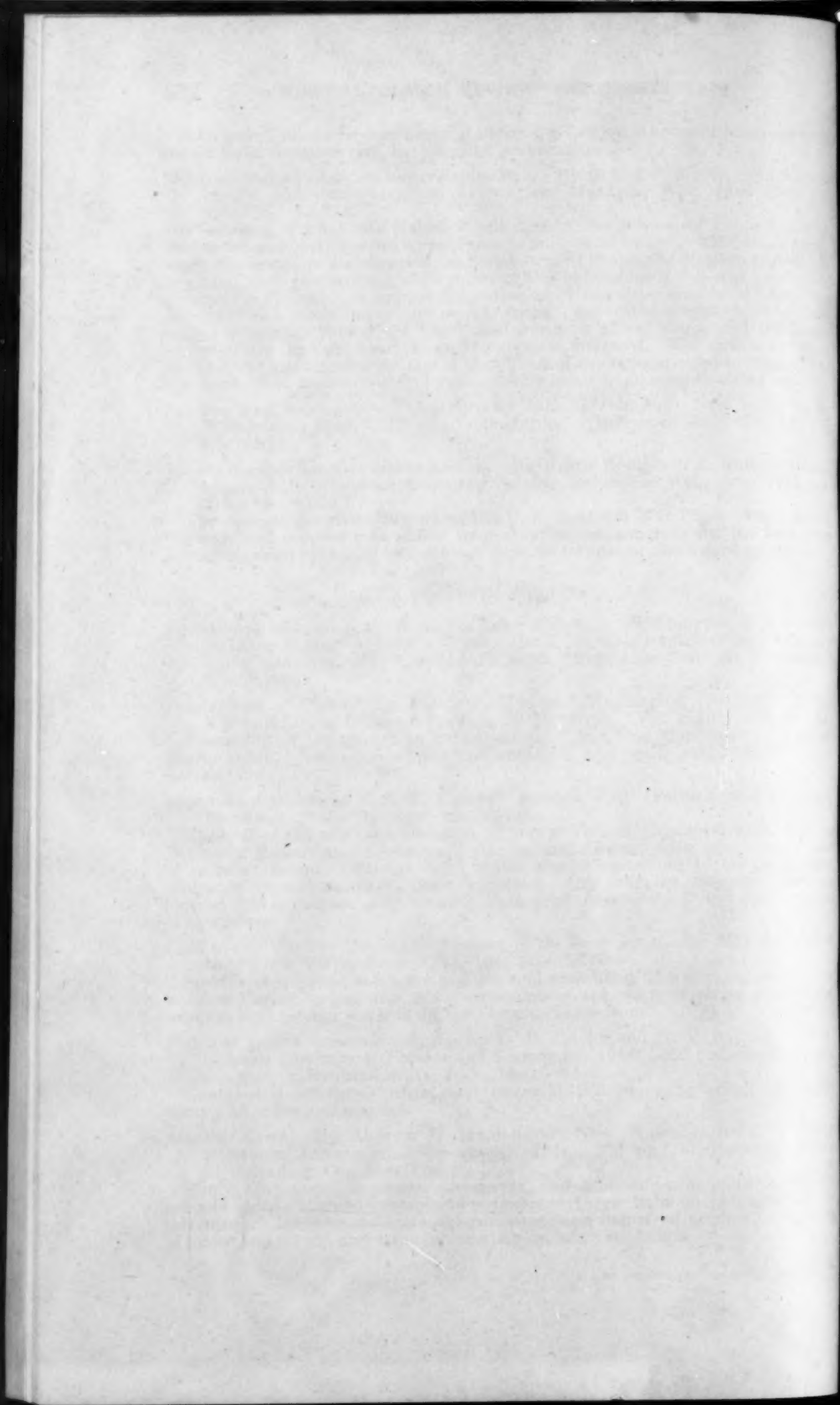
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